DOCUMENT RESUME

ED 118 426 SE 020 275

TITLE Consumer Education in Agriculture. The Vocational Agriculture Supplement to the Consumer Education Curriculum Guide for Ohio.

INSTITUTION Ohio State Dept. of Education, Columbus. Div. of Vocational Education.

PUB DATE 71

NOTE 96p.; For related documents, see ED 066 354 and SE 020 276-278

EDRS PRICE MF-$0.83 HC-$4.67 Plus Postage

DESCRIPTORS *Consumer Economics; *Consumer Education; Curriculum Development; Instruction; *Instructional Materials; Program Development; Secondary Education; *Teaching Guides; *Vocational Agriculture

ABSTRACT

The major purpose of this teaching guide is to create an awareness of the many opportunities for supplementing a vocational agriculture curriculum with needed instruction in consumer education. Following the same format as other resource supplements in this series, this publication considers (1) the economic system; (2) income procurement; (3) consumer behavior determinants; (4) consumer alternatives; (5) roles, rights, and responsibilities; and (6) community resources for consumer education. For each area, objectives, suggested learning and evaluation experiences, and resources are provided. Appendices include bibliographies of resource materials and model teaching plans for suggested units. (CP)

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VOCATIONAL AGRICULTURE RESOURCE SUPPLEMENT TO

CONSUMER EDUCATION

CURRICULUM GUIDE FOR OHIO

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VOCATIONAL EDUCATION DIVISION
STATE DEPARTMENT OF EDUCATION
COLUMBUS, OHIO

CONSUMER EDUCATION IN AGRICULTURE

THE VOCATIONAL AGRICULTURE SUPPLEMENT TO THE CONSUMER EDUCATION CURRICULUM GUIDE FOR OHIO

Ohio State Board of Education

1971

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FOREWORD

During June of 1971 the Ohio Department of Education sponsored and coordinated a Curriculum Workshop for the purpose of developing specialized supplements to the *Consumer Education Curriculum Guide for Ohio, Grades K-12.* More than eighty teachers and teacher educators, representing nine different subject areas attended. Each of them contributed significantly to the new guidelines.

Special acknowledgements are due Mrs. Sonia Cole, Assistant Director, Vocational Education, Home Economics Section, who has provided continual leadership in Consumer Education, Dr. Robert Goble, Professor of Education, Miami University, who served as Project Director in developing these supplements, Mrs. Margaret Driver and Miss Barbara Reed, Supervisors in Vocational Home Economics, Mr. Dennis Lupher, Consumer Edonomic Education Supervisor, Vocational Education Division, and Dr. Robert Myers, Associate Dean, School of Business Administration, Miami University.

In addition, special appreciation is extended to the following persons for their contributions.

Mr. Sam Blaskey, Office of Consumer Affairs, Executive Office of the President, Washington, D.C.

Mr. Paul Coleman, Executive Council, Department of Welfare, State of Ohio

Mr. Roger Downing, Executive Vice President, Ohio Consumer Loan Association

Mr. Solomon Harge, Director, Consumer Protection Cleveland, Ohio

Mr. Robert R. Kibrick of Olcott Forward Co.

Dr. Harlan Miller, Executive Secretary, Council on Family Finance Education & Educational Director, Institute of Life Insurance

Mr. Robert R. O'Reilly, Director of Changing Times Education Service

Mr. H. Lester Rupp, Grolier Education Corporation

Others, too numerous to mention, have had a positive influence on the workshop and the resulting supplements. Their dedication and assistance are genuinely appreciated.

Martin W. Essex
Superintendent of Public Instruction

ACKNOWLEDGMENT

This curriculum guide has been prepared to help teachers improve the agricultural curriculum of their schools by incorporating appropriate segments of consumer education.

Consumer Education can add a new and important dimension to the vocational agriculture curriculum. It has many implications for the student, whether his occupational goals are in agricultural production, or in the broad field of agri-business. It can enrich the teaching of high school students as well as adults and young farmers.

The need for consumer education and consumer protection has been a national concern for the past decade. Vocational agriculture joins other vocational services in developing curriculum guides designed to supplement the current vocational curriculum. This guide should be used in conjunction with one of the vocational agriculture curriculum guides now available for each taxonomy area. We hope that each teacher will find opportunities to use it as a means of further extending the program of vocational agriculture in his school.

This curriculum guide was developed through the efforts of seven teachers of vocational agriculture and with assistance by two of the state staff of agricultural education. The teachers and their schools include: Ray E. Diley, Milton Union; Roy E. Emerson, Berkshire; Dan Garver, Garaway; Lee Glass, Tri County Area Vocational Center; Rodney Kissell, Morgan Local; Roger Park, Licking Heights; and Robert Stone, Pettisville.

Before spending two weeks in a workshop developing this curriculum guide, each of these teachers taught demonstration units of consumer education, supplementing their vocational agriculture curricula, over a six month period. Thus providing them with an experience upon which to base these recommendations.

Staff members who gave leadership and guidance to this effort in consumer education included John P. Morgan, Supervisor of Vocational Agriculture, who organized the workshop; and Ralph J. Woodin, Professor of Agricultural Education at The Ohio State University, who directed the workshop sessions and edited the curriculum guide and teaching plans. Richard H. Wilson, Professor of Agricultural Education, assisted in the final editing.

We appreciate the effort and thought which has been given to this curriculum guide and we believe that it offers teachers of vocational agriculture an opportunity to further improve their programs and more realistically prepare their students for careers in agriculture.

James E. Dougan
Assistant Director
Vocational Education
Agricultural Education Section

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AN INTRODUCTION TO CONSUMER EDUCATION IN AGRICULTURE

This curriculum guide is the latest in a series prepared for use of Ohio Teachers of vocational agriculture. These guides are intended to serve in each of the instructional areas as an aid in planning programs of instruction, identifying needed curriculum materials, and in helping to determine other instructional needs.

Like other curriculum guides this publication is in no way intended to serve as "the curriculum" for any class or any teacher; instead it represents many concepts of consumer education which may be appropriate for use by numerous teachers in different situations. It's major purpose is to create awareness of the many opportunities for supplementing a vocational agriculture curriculum with needed instruction in consumer education.

Why should consumer education be taught as a part of a vocational agriculture curriculum? It is true that the curriculum is overloaded now and that some aspects of consumer education are taught in other courses such as Economics and Social Sciences. It is also true that much of vocational agriculture deals with helping people achieve better marketing of products and services and better buying of the equipment and supplies needed to operate farms. The greatest justification for teaching consumer education to students of vocational agriculture, however, lies in the fact that the safety and quality of the food on everyone's table depends much upon the care given it when produced, processed and marketed. Providing safe, high quality, nutritious food for all of society is an awesome responsibility. Those who are engaged in this industry must be educated for the task.

Another side of consumer education for agriculture is the fact that farmers together with the agribusiness complex constitute one of the largest blocs of customers in the nation. Because of narrow profit margins careful buying is an important aspect of efficient and low cost production. Still another point to the teaching of consumer education is that every student in the classroom will have problems as a buyer and as a consumer. These are vital problems and helping students prepare to solve them makes their class work relevant and challenging.

How should teachers make a start in teaching consumer education? The major objectives of vocational agriculture remains those of preparing students for careers in agriculture, placing these students in entry positions, and preparing those already employed for further advancement. Consumer education would appear to fit into each of the curriculums of vocational agriculture as integrated studies relating closely to many of the problems that are currently taught. In some cases consumer education will comprise additional units which go beyond subjects being taught.

A surprising number of resources for teaching consumer education are available in the community. Consumer education is concerned with local organizations, businesses and government agencies of various types. Another valuable source may be others in the school who are teaching consumer education. Similar curriculum guides have been prepared for teachers of social sciences and industrial arts as well as other sections of vocational education. Team teaching and exchange of classes may prove helpful to teachers in some schools.

This curriculum guide follows the pattern established by the Ohio Division of Vocational Education. It is concerned with developing understanding of the Economic System; Income Procurement; Consumer Behavior Determinants, Consumer Alternatives; Roles, Rights, and Responsibilities of Consumers; and Community Resources for Consumer Education.

The curriculum guide was developed using a format which begins with a concept after which learning and evaluation experiences are suggested and a few of the major teaching resources are listed. A complete bibliography is included on pages 56 to 60.

The concepts which are listed on each page of the curriculum guide represent general ideas which students should understand as a result of the teaching. Edgar Dale says that education must be more than a collection of experiences, but that the student must put all of his experiences into some manageable form

before he can remember them. Such statements have been set forth as concepts. With a little rewording they could be considered as teaching objectives.

Only a few evaluation and learning experiences have been suggested. It was assumed that each teacher would have personal preferences as to the learning and evaluation experiences which he might want to use. The suggested experiences and resources represent a start for the teacher who is beginning work in this area. Following the curriculum guide, there are several different teaching plans for selected units of consumer education. These teaching plans are the work of each of the teachers who aided in preparation of this curriculum guide. They are presented as examples of ways these individuals would approach the teaching of these particular units. These plans represent the type of start in consumer education that some teachers would make, and it is hoped that they will provide a springboard for further plans for teaching in this important area.

Following the introduction of each of several units in the curriculum guide illustrations have been incorporated which may be used as transparency masters for overhead projection. These drawings are taken from the "Consumer Education Curriculum Guide for Ohio, Grades K-12" prepared by the State Department of Education and are included here as a convenience to the teacher.

Ralph J. Woodin, Editor

THE ECONOMIC SYSTEM

Economics is "the name of the game in agriculture." Whether the student of vocational agriculture has as his goal the production of livestock, crops or horticultural products or a career in an off-farm agricultural occupation, he needs an understanding of the economic system in which agriculture lives, moves, and develops.

The general objective of this unit is stated as:

The student identifies the basic components and operation of the economic system so that he can understand his roles in the system as consumer, producer, and citizen.

This unit has been developed in terms of additional objectives which are important if the vocational agriculture student is to understand the economic system. These contributing objectives are:

1. The students lists and defines the identifiable characteristics and goals inherent in the economic system.
2. The student recognizes the circular nature of the economy and can interpret a model which represents the flow of goods, services, and money.
3. The student identifies the roles of government in the economy and is knowledgeable about his rights and responsibilities as a citizen to promote appropriate legislation and services to the benefit of the whole economy.
4. The student differentiates the effects of labor organizations and business on the economy and identifies their functions so he can relate their operation to his future roles.
5. The student is knowledgeable about the effect of earning, spending, saving, and borrowing habits of consumers on the economy.
6. The student identifies factors which contribute to the price of a product or service as a basis for understanding cost and wage determination.

These objectives serve as a guide to the teacher in developing an understanding of the economic system on the part of students of vocational agriculture. It should be noted that many of the concepts which have been identified are best taught at different grade levels and at different times in the curriculum. Some have been suggested for teaching at the ninth and tenth grade level in order to help students see how their future activities may contribute to the total economy. Other units have been designed for the final months of the senior curriculum and provide students with an opportunity to review a number of previous experiences in agriculture and relate them to the total economic system.

An understanding of some of the basic aspects of our economy requires confronting students with some of the tough questions of our time. Some of these are:

1. What is an acceptable level of employment?
2. How important is private ownership of property?
3. To what extent are people in agriculture dependent upon those in other businesses and industries?
4. What is the effect of inflation upon the agricultural business?
5. For what purposes should agricultural subsides be used?
6. What governmental regulation and protection is needed in agriculture?

These are some of the big questions which teachers can help students answer by providing opportunities for discussion and by developing appropriate learning and evaluation experiences, such as these outlines in this unit.

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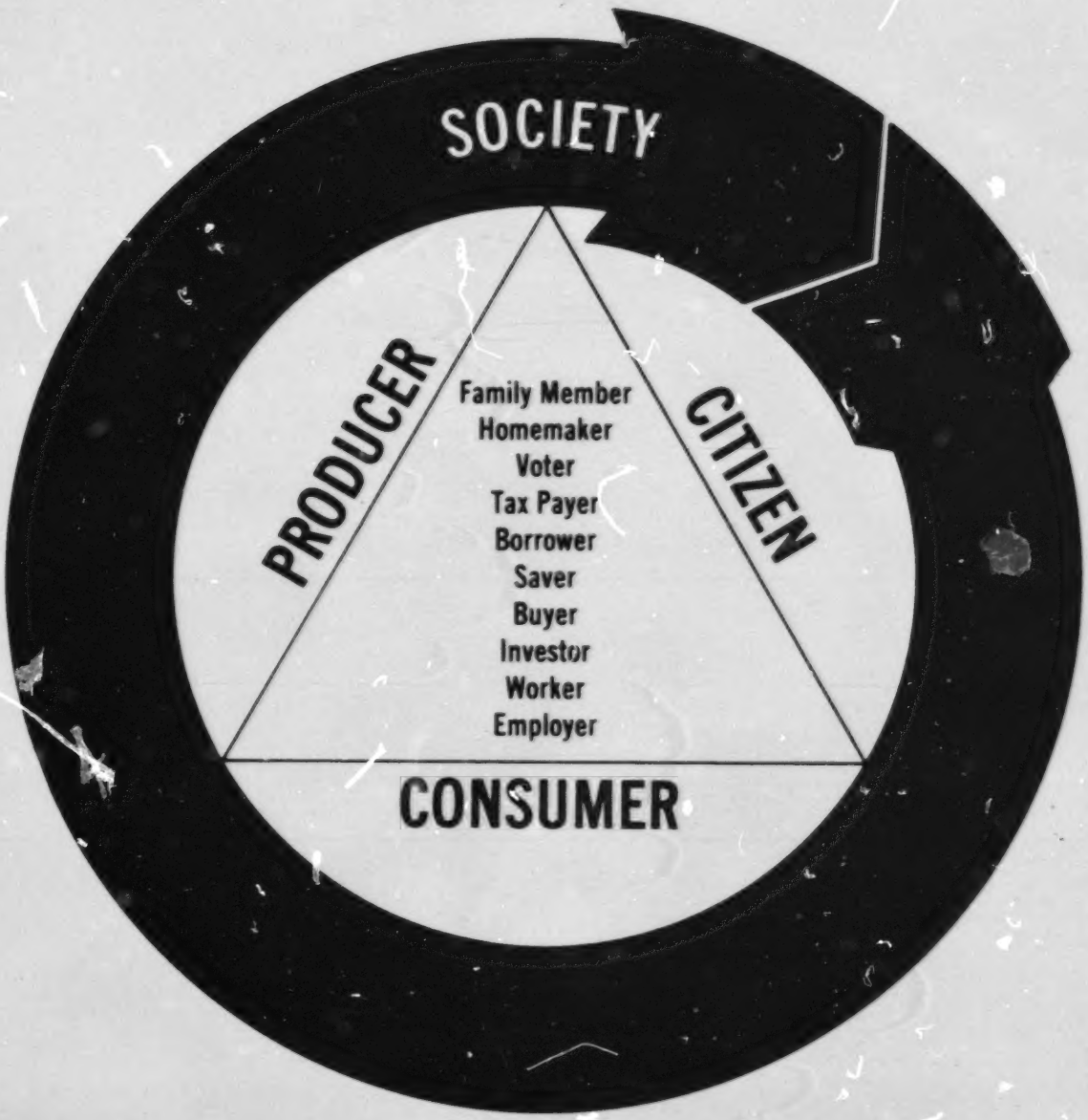


A TRANSPARENCY MASTER

Use this page as a transparency master for overhead projection.

Source: "Consumer Education Guide for Ohio, Grades K-12." Ohio State Department of Education

THE ECONOMIC SYSTEM

OBJECTIVE: The student lists and defines the identifiable characteristics and goals inherent in the economic system.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Various marketing systems are available through which we can market agricultural products.	9-12 & Young Farmers	List and discuss various marketing systems for livestock.	"Livestock Marketing" PP 19-23, Ohio Agricultural Education Service.
		Have resource personnel from various marketing systems discuss their system with students.	Personnel from: 1. Central or terminal Market 2. Local Auction 3. Direct to Consumer Marketer
		Compare the marketing functions which apply to grain and to livestock.	
Each of the agricultural marketing systems is influenced by all of the other marketing systems.	9-12 & Young Farmers	Have students review publications describing various marketing systems.	
		Assist students to role play marketing systems. Students should play the roles of buyers, processors wholesalers, retailers, etc.	
The structure of an agricultural business influences the business's buying and selling prices and other economic practices.	9-12 & Young Farmers	Have resource personnel from the various agricultural business structures provide a panel discussion on their businesses with emphasis on how the structure affects employment and distribution of profits and how this relates to the price of commodities and the effect the structure will have on the goods and services that will be provided in the future.	Personnel from the following business structures. Private ownership, cooperative, coroprations, integration, both vertical and horizontal. Reference—"Cooperatives in the American Private Enterprise System." Service, USDA "Four Common Ways of Doing Business." Illinois Vocational Agriculture Service. "Consumer Education Curriculum Guide for Ohio, Grades K-12", p. 11, Ohio Department of Education.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Economic assistance is provided to agriculture by federal agencies.	9-12	Have students study materials from federal agencies which provide services in their community and list the services provided by each agency.	Personnel and/or literature from the: F.H.A., A.S.C., S.C.S., Extension Service, R.E.A.
		Students identify federal programs and amount of money per year in Ohio and locally for each from the following areas:	"Feed Grain Program" (current) Ohio Cooperative Extension Service.
		1. Farm income stabilization 2. Conservation 3. Cooperative credit agencies	"Voluntary Wheat Program" (current), Ohio Extension Service
			"The Daily Summary" USDA Washington, D.C. 20402 "Farm Home Administration--Annual Report" USDA Washington, D.C. 20402.
			Film "Opportunity Land." The Budget in Brief," U.S. Bureau of the Budget.

THE ECONOMIC SYSTEM

OBJECTIVE: The student recognizes the circular nature of the economy and can interpret a model which represents the flow of goods, services, and money.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Money circulates between agricultural and other businesses in exchange for goods and services.	10	Have the students list the agricultural businesses through which money circulates before meat is brought by the homemaker. Determine the number of times money for a commodity may move back and forth from a farmer, loaning agency and an agricultural business as a result of a sale of one farm commodity.	"Consumer Economic Problems" Warmke, et al
Money circulates between agricultural and non-agricultural businesses in exchange for goods and services.	10	Have the class identify businesses not primarily related to agriculture but which have an additional volume of business because of agricultural demand.	Film: "Providers of Plenty." Farm Film Foundation. Film: "Road to Cameron" Farm Film Foundation.
The financial success of an agricultural business depends upon the demand for its goods and services.	11 or 12	Have students solve the problem of balancing the production of grain using the following example and working in pairs of two. Assume each student has 100 acres of crop land which will yield 100 bushels/acre with the following yearly demands and prices at that level of production.	"Consumer Economic Problems" Warmke, et al. Page 318.

Crop	Yearly Demand	Price/bushel
Wheat	50,000	$1.75
Oats	50,000	.90
Corn	60,000	1.40
Barley	70,000	1.60
Soybeans	60,000	2.75
	290,000	

Total production costs = $40 per acre. Each student should be limited to two alternative grains which he can produce. Calculate as follows:

For every 1000 bushels surplus—subtract .10¢.

For every 1000 bushels shortage—add .10¢.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
The government supports agriculture financially and is itself financially supported by agriculture.	11 or 12	Have students trace the flow of local, state, and federal tax money from the taxpayer to the utilizer of the tax money.	
		Have students identify programs and money provided for them through the federal government.	"Teachers Guide to Teaching Farm Income Tax" U.S. Treasury Department.
The availability of credit for agricultural production alters the amount of a farm commodity which can be purchased.	10	Have a banker discuss with the class how credit increases purchasing power and explain how the different types of agricultural loans cause variation in buying power.	"Consumer Economic Problems" Warmke, et al. Page 152.
		Students can compare time required for getting started in farming by investing only when cash becomes available vs. systematic use of credit. Include comparisons of yearly incomes, years required for getting started and amount of money spent by the farmer in agribusinesses and the resultant amount of money which flows in the community.	

THE ECONOMIC SYSTEM

OBJECTIVE: The student identifies the roles of government in the economy and is knowledgeable about his rights and responsibilities as a citizen to promote appropriate legislation and services to benefit the whole economy.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Local, state and federal government programs may influence income from agriculture.	10	Have students identify taxes and regulations which affect both expenses and income in agriculture.	
		Help students to compile a list of federal, state, and local governmentally associated agencies, institutions, and individual employers that directly affect the economy of agriculture.	"Buckeye Farm News" Magazine "Farm Bureau Legislative Letter" 245 N. High St. Columbus, Ohio
		Have federal, state and local government employees visit class and discuss their responsibilities and how they serve in the community and nation.	
Agriculture has serious economic problems which can be solved only by sound legislation.	12	Have students contact organizations such as the Farm Bureau to acquire information concerning agricultural problems and lobbying procedures.	"Out of the Hopper" Ohio Grain Feed and Fertilizer Association, 5625 N. High Columbus, Ohio
		Students may contact agricultural leaders and "innovators" to identify their procedures for getting agricultural problems solved.	
Legislators in the state and nation need to be informed of needs in agriculture and the total population if agriculture's needs are to be met.	12	Students selected may be assigned to contact their representatives or senators in the Ohio General Assembly to find what source and amount of information and opinions were presented concerning the latest agricultural legislation. They may then survey the community to determine its attitude and awareness of this agricultural issue.	

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
		Help students prepare FFA public speeches to inform the community of the scope of agricultural problems and by serving as speakers and panel discussion members.	
		Have students contact one of the county commissioners to find the most recent agricultural and commity issue voted upon and source and amount of information received by the county commissioners. Follow with appropriate class discussion.	

THE ECONOMIC SYSTEM

OBJECTIVE: The student differentiates the effect of labor organizations and businesses on the economy and identifies their functions so that he can relate their operation to his future roles.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Organized labor may have a direct affect on the cost of producing agricultural commodities.	11-12	Help students to compute the cost of production per bushel of corn and the per acre cost, calculating all labor at $1.65 per hour as compared to $3.00 per hour. Have students list the possible causes of agricultural commodities increasing in price, demonstrating that labor costs are an important factor affecting prices. Have a factory labor union member who has had the experience of working as a non-union member discuss the working conditions, productivity per laborer, and his purchasing power before his factory had labor union as compared to the current conditions.	
Laborers must be prosperous and unemployment low if there is to be high consumption of quality agricultural commodities and a well functioning economy.	11-12	Help students to determine the affect on prices and consumption of farm commodities during the depression of the 1930's and the recessions since 1950.	
The financial success of an agricultural enterprise is affected by the time at which it receives needed goods and services.	11-12	Determine the loss in yield and money to a grain farmer if he is held back two weeks for parts and services while planting 500 acres of corn and yield decreases at the rate of one bushel per acre per day. Then list possible causes for this delay in securing parts or services.	

THE ECONOMIC SYSTEM

OBJECTIVE: The student is knowledgeable about the effects of the earning, spending, saving, and borrowing habits of consumers on the economy.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
When people have more money available to spend, more agricultural products will be purchased.	10	Have students survey local machinery dealers to determine the total amount of money spent on machinery during the previous five years and compare with annual county farm income. Compare with farm income. Compare farm income and cash expense of several Ohio counties in various geographic areas of the state.	"Facts of Farming in Ohio" Department of Agricultural Education, Ohio State University.
		Have the class compare the amount of red meat consumed during the previous two years, the rate of employment and the average cost of red meat during these same years.	"Livestock Marketing" pp 8-15. Ohio Agricultural Education Service.
When people save larger amounts of money more money is made available for loans which may be used in agriculture.	10	Have a local bank representative discuss with the class the sources of money for loans and why interest rates vary.	"Consumer Economic Problems" Page 225 and 270. Warmke, et al.
During a period of rapid inflation, interest rates usually rise making long term loans less desirable.		Help students to calculate the difference in total interest cost on a 20 year loan when loan is made at 6½% as compared to 8½% interest.	
		Have the class compute the annual interest on a farm mortgage of $50,000 and compare this with other farm expenses.	
		Have students determine the increase in land value over a 20 year period of a 500 acre farm valued at $500/acre with land value rising at 5% per year.	
		Have students calculate the annual depreciation in the buying power of the dollar and determine the influence on interest rates.	

THE ECONOMIC SYSTEM

OBJECTIVE: The student identifies the factors which contribute to the price of a product or service as a basis for understanding cost and wage determination.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
The price of products and services are generally determined by supply demand in a free economy.	11-12	Bring three cans of cold soft drinks into the classroom. Auction the first three cans to the class with the understanding it has to be drank after class. Auction the next two off with the understanding that they can be drank immediately after purchase. List the prices on the board. Then bring more than enough cold drinks for everyone into the classroom. Auction them off. List each of the prices individually on the chalkboard. Relate prices to supply and demand.	"Consumer Economic Problems" Pages 316-320. Warmke, et al.
		Have students attend a livestock auction on two different evenings and compare the difference in price paid for similar animals. On the two nights note the difference in number of animals of that specie sold, and the number of buyers present.	
		Show a film strip.	"Role of Consumers' National Consumer Finance Association.
In our economy, supply and demand alone do not always determine prices because of certain artificial barriers such as government subsidies, monopoly either on the part of management or labor and price fixing.	10	Show students how to compare the price of wheat with the amount produced when support prices were on wheat as compared with the price and amount of wheat produced when there is no support price.	"Consumer Economic Problems" pp. 324-330 Warmke, et al.
The availability of some agricultural commodities and services varies with the time of year and from year to year.		Help students to list agricultural commodities and services whose supply would vary considerably at a particular time of the year. Market hogs, lambs, milk and grains provide good examples.	

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
		Check USDA statistics on livestock and livestock products marketed over the past ten years. Help students make a graph to illustrate the variation from year to year. Do the same with grain.	"Livestock Marketing" Ohio Agricultural Education Service "Grain Marketing" Ohio Agricultural Education Service.
The "cost-price squeeze" causes farmers to reduce their labor costs.	10-12	Assist students to figure the "cost-price squeeze" that has occurred on a farm product. Figure the cost per acre of producing corn from farming program records. Then identify methods of reducing costs through labor saving practices.	
		Help students compare the cost of milk production per cow in a 60 cow pipeline milking set-up as compared to a 15 cow herd milked by individual milking machines.	
When an agricultural commodity has a constant supply and a constant demand, the price should remain the same throughout a year except for inflation.	9-10	Have students compare the cost of items that are produced in a constant supply or a surplus supply. Include as examples: Livestock Feeds Canning Crops Machinery Building Materials	
		Have each student construct a graph showing the variation in livestock prices and numbers marketed for the past year. Compare prices and market supplies of choice steers, butcher hogs and lambs.	"Consumer Economic Problems" pp. 320-324. Warmke, et al. Film: "Lock in Grain Profits by Hedging" Swank Motion Pictures.
Discounts are often given for ordering agricultural commodities ahead of time needed and/or in large quantities.	9-10	Compute the total value of a 2% cash discount for a farmer for one year for the following commodities: Fertilizer Seed Gasoline and oil Purchased feed	"Consumer Education Problems" Page 319. Warmke, et al.

INCOME PROCUREMENT

The overall objectives for income procurement is:

The student develops an understanding of income procurement with analysis of how security and wages relate to education and training. The student will broaden his economic concepts to the point that each recognizes his vocational potential and his importance in our economic society.

The following learning experiences contribute to this overall objective and are the basis for the development of this unit:

1. The student identifies and utilizes available resources in reaching his goals in terms of his potential capacities and as a way to achieve personal satisfactions.
2. The student explores, investigates and selects an occupational area which he considers appropriate to his abilities and interests in order to function in society.
3. The student identifies and examines private and public agencies on the local, state and national levels which will enable him to secure continuous education and training in order to achieve personal satisfaction and fulfillment.
4. The student recognizes and accepts the total affect that his income procurement will have on the individual, the family, the community, and the society.

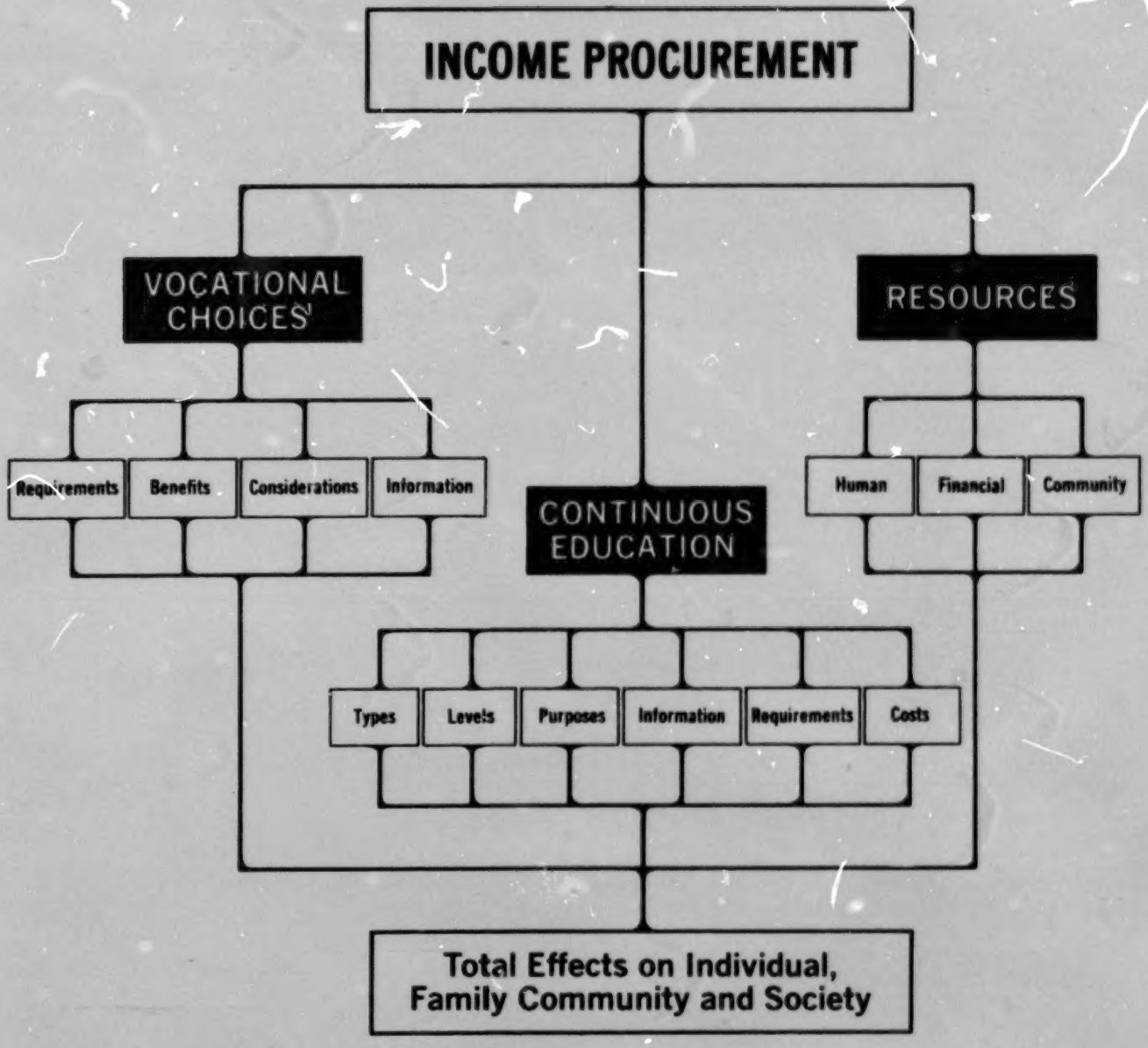
A secure and satisfactory income is one of the major goals of those enrolled in vocational agriculture. Over the years much progress has been made in improving the income of the farmer and agri-businessman as compared to the income of other workers. Unfortunately, much more progress needs to be made.

This unit is designed to bring the student face to face with some of the basic problems of planning for and securing a satisfactory income in the field of agriculture. Many of these concepts are particularly appropriate for teaching career selection and so are appropriate in the 9th and 10th grade levels.

On the other hand income procurement relates closely to the later stages of career selection which often occur at the 12th grade level as the student makes a final decision as to the career he will enter upon high school graduation.

An important and often overlooked unit deals with the many opportunities for continuing agricultural education which are available in most communities.

The student in vocational agriculture, in most communities, has many alternative methods of income procurement. He may become a farm operator, he may work in one of Ohio's thousands of agriculturally related businesses and industries or he may be engaged in the field of horticulture, forestry, conservation or food processing. In addition to his major source of income he may elect to secure supplemental income through part-time work, capitalizing on his contacts with the agricultural community. He may become a part-time farmer. This unit permits the student to make wiser decisions about his future income as a result of broad consideration of the total problem.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A TRANSPARENCY MASTER

Use this page as a transparency master for overhead projection.

Source: "Consumer Education Guide for Ohio, Grades K-12." Ohio State Department of Education

INCOME PROCUREMENT

OBJECTIVE: The student identifies and utilizes available resources in reaching his goals in terms of his potential capacities and as a way to achieve personal satisfaction.

Concept	Grade Levle	Suggested Learning and Evaluation Experiences	Suggested Resources
Agricultural students have many personal resources which affect their income potential, such as their talents, abilities, skills, knowledge, interests, attitudes and personalities.	11-12	Have students give their idea of the meaning of personal resources. List on the chalkboard all the personal resources the students can identify. Have each student rank all of his personal resources from highest to lowest.	"Business Behavior" First five chapters. Allen R. Russon. Agri-business Manual No. 4, "Human Relations in Business. Ohio Agricultural Education Service, OSU.
Increasing their own personal resources can increase the agricultural student's income potential.	11-12	Let students suggest people in the community who they think have outstanding personal resources. Discuss the personal resources of these people which contributed to their success. Have a successful businessman from the community explain some important personal factors that have helped him in his business.	"I Dare You" H. Danforth. pp. 24 to 93.
Both farmers and off-farm businessmen are caught in a cost-price squeeze that affects their income.	11-12	List the factors which have contributed to the cost-price squeeze. Discuss with teachers the reasons why there are fewer and larger farmers today than ten years ago. Help students to make a survey of the financial problems of agricultural service organizations.	"Occupational Outlook Handbook" U.S. Department of Labor.
Each individual desiring financial success must develop a personal financial plan.	11-12 & Y.F.A.	Discuss the financial plan of an agri-business which the students believe successful. Bring in a young farmer who is following a desirable financial plan and have him explain his goals and ways of reaching them.	"Doane's Farm Management Guide," Chapter 3, page 41.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
		List the alternate possibilities for a young farmer who needs added income and arrive at priorities which will assist him	
The individual must spend intelligently so that he gets the most goods or services for each dollar spent.	11-12 & Y.F.A.	Discuss how priority in buying such things as livestock, machinery, and fertilizer may increase income potential. Have students explain how efficient spending for labor, feeds, machinery and finances can affect income. Using a recent graduate as an example, discuss how the use of money for additional education improved his total lifetime income potential. Have certain students explain spending for transportation, proper clothes, etc., for use on a part-time job as an aid to increasing income potential.	"Farm Business Management" Castle and Becker, Chapters 1 & 8.
Part-time farming is popular as a means of adding income which can aid in getting a start in farming.	11-12 & Y.F.A.	Discuss the possibilities of part-time jobs to supplement farm income. Have students figure the added income that can be expected from a 100 day per year, part-time, off-farm job as a carpenters helper and also the added expense required. Determine the hours necessary away from the farm and consider how this would affect the farm operation. Have students consider the type of farm operation best suited for part-time farming.	"Some Economic and Social Aspects of Part-Part-Time Farming in Ohio" O.A.R.D.C. Bulletin 837.

INCOME PROCUREMENT

OBJECTIVE: The student explores, investigates, and selects an occupational area which he considers appropriate to his abilities and interests in order to function in society.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Agriculture is a large industry which provides many occupational opportunities and many types of employment.	9-10 Career Selection	List agricultural occupations in the school community, including both production and service type work. Discuss occupations of graduates of the department for the last five years.	"Occupations of 1970 Graduates of Vocational Agriculture in Ohio" R. E. Bender Department of Agricultural Education, OSU. "Occupational Outlook Handbook" The U.S. Department of Labor.
There are many personal requirements necessary for one to be a success in agriculture.	9-10 Career Selection	Discuss with the class personal requirements for success in agricultural occupations. Have successful graduates now in various agricultural fields explain personal requirements they consider necessary for success.	"Business Behavior". Allen R. Russon, Chapter IV. "Agri-Business—Is It For Me" William E. Diley, Ohio Agricultural Education Service, 1971.
Meeting the financial requirements for success in a farm operation producing a net profit of $1,000 requires careful planning.	11-12	Have a successful farm operator discuss his capital investment, operating costs and labor requirements with the class. Arrange field trips to two or three well-organized farms for first hand observation. Compare the business organization of these farms with the "Ohio Farm Business Analysis Report." Have students make a list of advantages and disadvantages of becoming a farm operator.	"Ohio Farm Business Analysis Report" (current issue) Department of Agricultural Economics, OSU.
Agricultural service and supply businesses must be carefully planned and organized if they are to be financially successful.	11-12 Planning Occup. Exp.	Arrange class field trips to two agricultural businesses, providing both goods and service. A local elevator and a county cooperative supply center would be appropriate.	

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
		Discuss with the owner the investment costs, operating costs, labor required, advantages and disadvantages, of the off-farm business.	
		Upon returning to the classroom, list the future costs of training or education that will be necessary for students to enter these organizations.	Unit 1 "Opportunities in Agricultural Occupations" pp. 1-19. See also Units 1-15. Ohio Agricultural Education Service, 1970.
		Discuss in class the future of the off-farm agricultural business in the area.	
Part-time farming may be a desirable way of life.	11-12	Ask a successful part-time farmer to discuss his farm business organization including costs, time required, and future plans with the students. He should also discuss his off-farm job.	"Part-time Farming in Ohio," OARDC Bulletin No. 426.
		Lead a class discussion on why part-time farming is becoming more popular in this area.	
		List on the chalkboard the possible off-farm work available to part-time farmers in this area and the costs of preparing for part-time employment.	
		Discuss with the class advantages and disadvantages and the future of part-time farming in this area.	

INCOME PROCUREMENT

OBJECTIVE: The student identifies and examines private and public agencies on the local, state, and national levels which will enable him to secure continuous education and training in order to achieve personal satisfactions and self-fulfillment.

Concepts	*Grade Level*	*Suggested Learning and Evaluation Experiences*	*Suggested Resources*
Different types and levels of education are available to individuals interested in agriculture at various times of their lives to help them gain personal and economic satisfaction.	10-12 and Adult	Students identify sources of educational programs offered in agriculture or a related area which they perceive as contributing to their earning ability. The school guidance counselor meets with the class to discuss the process of career choice and the laboratory resources available. The class makes a comparison of educational programs available to them. 1. Regular high schools, day and evening. 2. Evening short course 3. Summer school 4. Vocational-technical schools 5. College—Jr. or 4 yr. 6. University short course 7. Agricultural Extension meetings 8. Young farmer and adult farmer classes. *Private Agencies:* 1. Commercial schools such as the Lincoln Electric-Welding or Briggs & Stratton-Small Engine Schools 2. Product information meetings and equipment field days 3. Apprenticeship programs a. Meatcutting b. Agricultural Mechanics	Guidance and counseling publications in school library.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Training provided by one or more educational agencies is helpful in raising the agricultural or agri-business worker's economic level or in increasing his sense of self-fulfillment.	10-12 and Adult	Students conduct a survey of local agricultural occupational opportunities to determine the training and knowledge essential for occupational improvement and advancement. As a class, students research and develop a directory of local occupational opportunities and list skills needed, levels of performance required, opportunities for advancement and means of gaining entry jobs.	Personal Interviews.
Various educational institutions offering agricultural education have minimum standards which must be met for admission. These requirements will vary with the agency offering the program and with the type and level of program being offered.	10-12 and Adult	Students review available information about agencies offering agricultural or related educational activities that may help the individual in selecting an appropriate training program. Students make a comparison of locally offered educational programs in light of course offerings, prerequisites, length of program, depth of training, cost and potential opportunities.	Catalogs from various educational agencies.
It is possible for an individual to educate himself through personal effort when formal education is not possible.	9-12	Have students identify 6 to 10 successful persons in agricultural occupations who received limited formal education but were able to educate themselves. Include both agribusinessmen and farmers. Have selected students conduct a taped interview with two or three of the above persons on the subject of self-education. Have students list the probable difficulties in the future for the self-educated in farming and in related agricultural businesses.	"Consumer Economical Problems" Warmke, et al, 1971, pp. 45-107.

INCOME PROCUREMENT

OBJECTIVE: The student recognizes, explains, and accepts the total effect that his income procurement will have on the individual, the family, the community, and the society.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Correct decisions for choosing a vocation help one reach higher goals, get more satisfaction out of life, and improve income.	9-10	Have students list factors they should consider in choosing a vocation.	
		Have students compare the earnings of a drop-out, a high school graduate, and a college graduate.	
		Have a drop-out who has come back to school explain why and how he made this choice.	
The amount of income received and the method of procurement by the individual directly affect the family—in terms of living standards, accomplishment of goals, and opportunities for successful living.		Teacher explains how the amount and quality of products produced by the individual and the amount and quantity consumed by the buyer affect one's income.	"Consumer Economic Problems" Warmke, et al, 1971, Chapter 3.
		List in class the conveniences a family of four in the $10,000 to $12,000 income bracket has in comparison to a family of four in the $6,000 to $8,000 bracket.	"Managing Living Time" Raines, Chapters 4-7.
		Discuss why students from the higher income bracket, above, receive more schooling than those from the low-income group. Why are there more drop-outs in the low income group?	
The economic standards of the community and society in general are improved when the individual's income level is raised.		Discuss the reaction of wage earners in the community regarding their spending plans when new industry moves into the area.	"Consumer Economic Problems" Warmke, et al, 1971, Chapter 5.
		List the changes which accrue to merchants, auto agencies, super markets, and similar retailers in the above area when more money is available.	

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
		Determine the effect of more money in the community on the demand for farm products. Which products are most affected?	
		Have students determine the effect of millage for the schools and calculate the change in valuation per student which resulted from the establishment of new industries in the district.	Local superintendent of schools.

CONSUMER ALTERNATIVES

The overall objective for this section is:

The student uses the decision-making process by analyzing consumer problems and exploring consumer information so that he can make choices to meet needs and wants, current and future, and enable greater satisfaction from available sources.

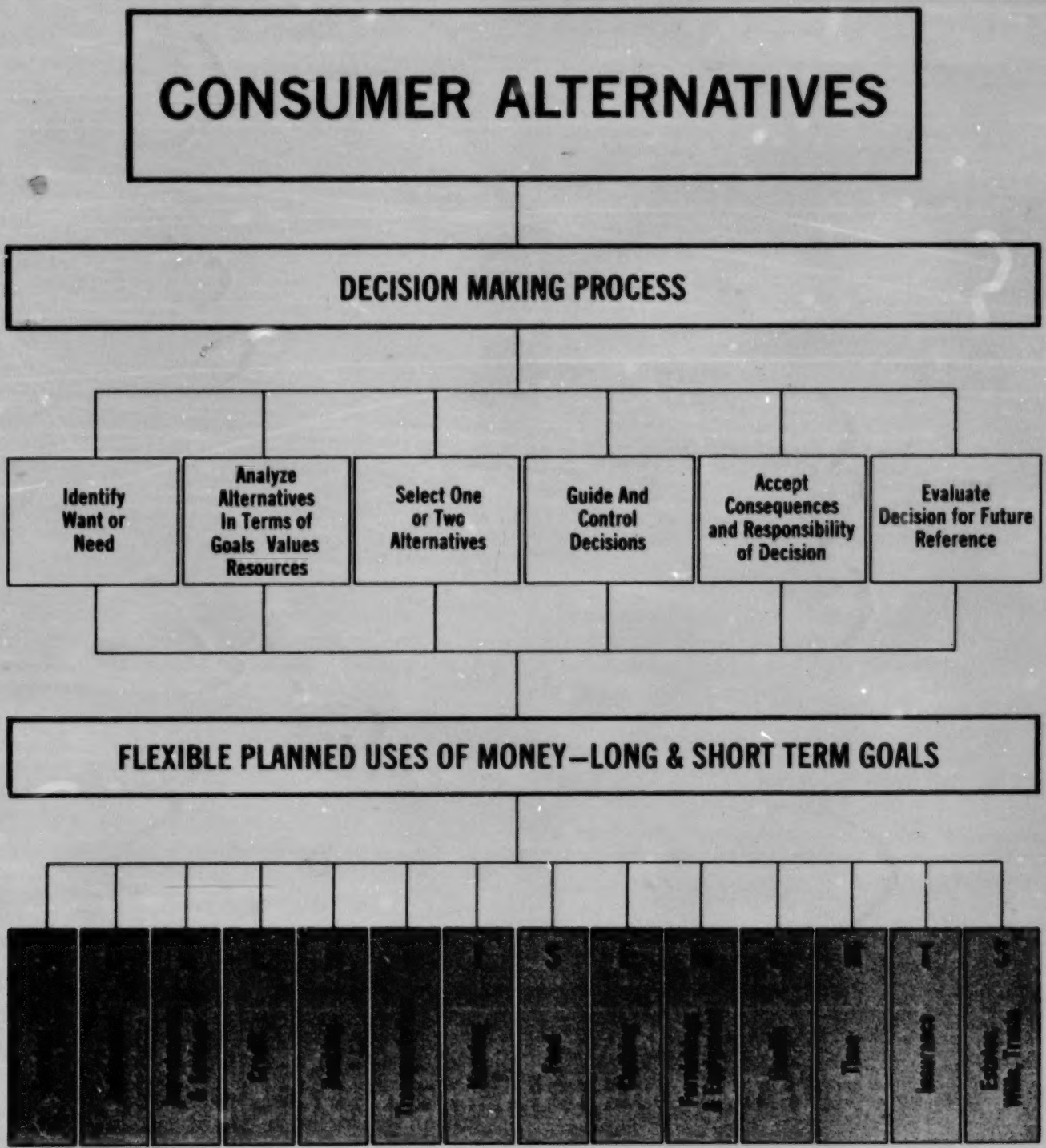
Two sub-objectives help in meeting the overall objective.

1. The student demonstrates that he can use the decision-making process in making economic decisions to meet wants and needs.
2. The student develops and recognizes the value of a flexible plan for the use of money when making decisions among various economic alternatives.

Much of vocational agriculture has been concerned with "buymanship." Students have been taught how to get the most for their money when buying feeds, seeds, fertilizers and agricultural equipment. Those who have been fortunate enough to have their own farming programs have been able to obtain experience in decision-making when selecting the best of several alternatives. Further experience in money management has been provided through the study of farm business planning, both in high school and as a part of continuing education.

Unfortunately, in all too many cases, students have not had opportunity to intellectualize upon the decision-making process which they have used and to compare notes on how to make the best possible use of this important process.

This unit includes important concepts regarding the decision-making process and the development of plans for money management which are most appropriate to those who would enter agricultural careers. If, as a result of this unit, students learn that what one does with his money depends upon his own interpretation of his needs and wants, and that planned spending will help them to maximize satisfaction from their incomes, then the time spent will be well justified.


CONSUMER ALTERNATIVES
DECISION MAKING PROCESS
Identify Want or Need
Analyze Alternatives In Terms of Goals Values Resources
Select One or Two Alternatives
Guide And Control Decisions
Accept Consequences and Responsibility of Decision
Evaluate Decision for Future Reference
FLEXIBLE PLANNED USES OF MONEY—LONG & SHORT TERM GOALS

A TRANSPARENCY MASTER

Use this page as a transparency master for overhead projection.

Source: "Consumer Education Guide for Ohio, Grades K-12."
Ohio State Department of Education

CONSUMER ALTERNATIVES

OBJECTIVE: The student develops and recognizes the value of a flexible plan for the use of his money when making economic decisions among various alternatives.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Capital is necessary for the person getting started in an agricultural occupation.	11-12	Have students determine the amount of capital required to start into their kind of farming. Ask students to study ways to acquire needed capital. List present assets.	"Farm Business Planning Unit B-1" Ohio Agricultural Education Service.
Planned spending helps the student to obtain maximum benefit from the income he has available.	11-12	Students anticipate probable income and develop two possible budgets for comparable purposes. Teach the principle of diminishing economic returns such as the effect of nitrogen on corn.	"Unit Budget for Livestock and Crop Enterprises" Ohio Agricultural Education Service 1969. "Profit Maximizing Principles Ohio Agricultural Education Service, page 24.
When one's monthly income fluctuates, as in farming, he must use long-range planning in order to meet the change.	11-12	John plans to enter hog business based upon his fall corn crop, however, the corn crop failed. What does John do? A student with a 10-acre corn crop plans to cultivate for weed control, however, he may substitute the cultivation with a herbicide. Which is his best choice?	"Profit Maximizing Principles" Ohio Agricultural Education Service.
A student should attempt to interpret his needs and desires before investing his money.	12	List possible places students spend their money and categorize into needs or wants. Have students compute the total cost of owning and operating a car and decide what needs the car will meet.	"The Cost of Running a Car" Modern Consumer Education.
All available information on alternative products or services should be assembled and analyzed. Among these, salesmen's claims, advertising, and labeling information, are factors that influence purchasing decisions.	12	Ask students to clip approximately 25 advertisements and to sort them into the following categories. 1. Overstatement of facts. 2. Misrepresentation of product. 3. Sounds good, but meaningless. 4. Used by "important" people. 5. Factual 6. Informative and representative	"Marketing, Sales Promotion and Advertising"—7th Edition. Nolan and Warmke, Chapter 11.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
		Determine the kind of information that should be included in advertising and labeling. Arranged field trip to a local newspaper to get the editor's views on the kind of information that should be included in advertising.	"Agribusiness Service and Supply"—Unit 5. Ohio Agricultural Education Service.
Borrowing, inflation, taxation and insurance costs are factors that affect the decision to rent or buy real estate.	YFA	Help young farmers calculate the fixed costs of owning a farm. Teach the advantages of borrowing by having students figure the opportunity costs of a livestock operation.	"Profit Maximizing Principles" Ohio Agricultural Education Service, pages 41 and 81.
Appropriate banking services should be used when engaging in financial transactions while in high school.	9-10	Have students fill out sample signature cards, deposit slips, and savings withdrawal slips. Also write sample checks and balance a checking account. Help students open their own checking and savings accounts. Help students use bank credit for farming program expansion rather than borrowing from their parents.	"Savings and Checking Accounts" AWE 3. Ohio Agricultural Education Service.
Agricultural credit permits the use of future income to satisfy the present production needs.	11-12	Demonstrate merchantile credit by having students compute the charge on a monthly feed bill at 1% per month. Show how short-term credit from a commercial bank may be used to an advantage for paying the fertilizer bill. Intermediate credit, such as P.C.A., may be used in financing projects such as feeder steers and farm machinery. Long-term credit, such as that of the Federal Land Bank, should be used to purchase items such as farm real estate. Invite resource people from a bank, P.C.A., and F.L.B. to visit the class and explain their kind of agricultural credit.	"Credit" AWE4. Ohio Agricultural Education Service.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Long-range goals can be set by students, which will help them to make sound economic decisions and plans.	9-10	Those students interested in production agriculture should develop a 5-year plan for growing into farming. Those students interested in a career in an agricultural business should develop a long-range plan for securing advancement in this business.	"Farm Business Planning" Unit A-IX, Ohio Agricultural Education Service. "Agribusiness Service and Supply—Unit 1" Ohio Agricultural Education Service.

CONSUMER ALTERNATIVES

OBJECTIVE: The student demonstrates that he can use the decision-making process in making economic decisions to meet his wants and needs.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Soundness of decision making often determines the difference between success or failure in agriculture.	12 YFA	Relate a teaching unit of weed control in soybeans to the decision-making process through the following suggested learning experiences: "What method shall John use to control weeds in his soybean crop?" How important is the decision-making process? How often does a student in production agriculture make decisions?	"Agronomy Guide" Current issue. Ohio Extension Service.
Decision making experience helps the individual to increase his ability and confidence in decision-making.	12 YFA	Who should determine what method of weed control to use the student, Dad, the Vo-Ag teacher, or a salesman? When was the last time you made an important decision by yourself? List some decisions you have made within the last week. List some decisions that others have helped you make within the last week.	
In making sound decisions, it is important to assemble facts, consider possible alternatives, analyze this information and select the best alternative.	12 YFA	List all the alternatives and information that should be considered in controlling weeds in soybeans and select the best one. Students should be led to evaluate all facts and alternatives. Possible items to consider are cost, necessary knowledge and skills, available equipment and probable results.	"Using Pre-emergence Herbicides" Ohio Agricultural Education Service Filmstrip. "Consumer Education Curriculum Guide for Ohio, Grades K-12", Pages 47-48.Transparency Page 45.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
After the decision has been made and appropriate action taken, it is important to accept the consequences and responsibilities of the decision.	12 YFA	After the decision has been made as to the method to be used, take appropriate action using a check plot as control. Students should be encouraged to accept full managerial and financial responsibility for their decisions. Occupational experiences have more meaning if the financial consequences are assumed by the student.	
The results of all decisions should be evaluated as a basis for future improvement of agricultural practices as well as the soundness of the decision-making process.	12 YFA	The results of the weed control method used should be evaluated and compared to the control plot and then recorded in the students project or farm record book. These results can be used for future planning. Students should be led to see the steps they have gone through in the decision-making process. It is then possible for them to evaluate the soundness of their reasoning in reaching an important decision.	"Ohio Commercial Farm Account Book" or "Student Occupational Experience Book".

CONSUMER BEHAVIOR DETERMINANTS

The overall objective of this unit is:

The student recognizes that consumer behavior, as affected by learning and communication, is a social phenomena subject to all the mediating forces bearing on social action and behavior. The possibility of altering consumer behavior or affecting it depends to an extent on the marketer's ability to structure and restructure the consumers beliefs and attitudes.

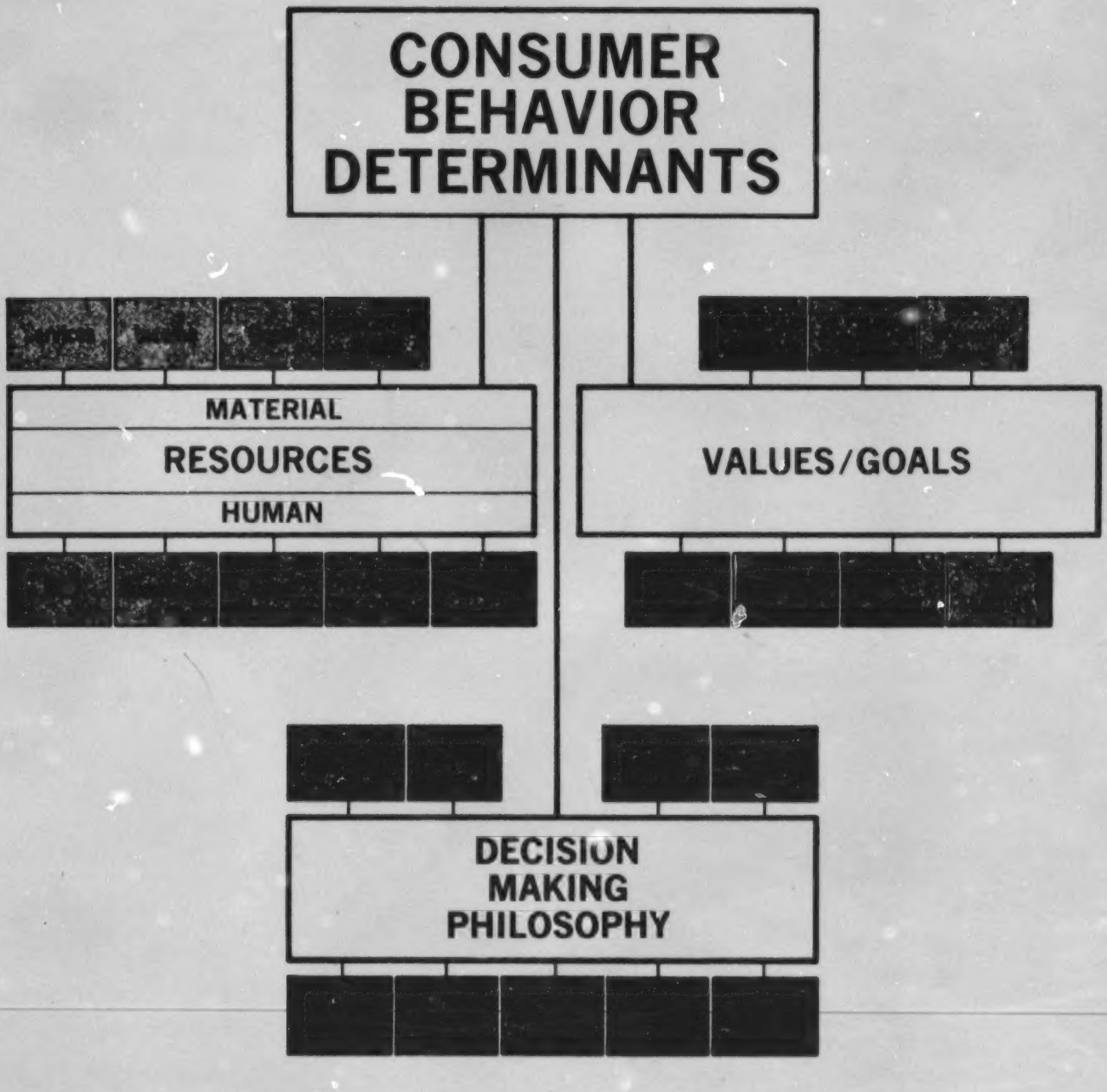
This unit has been structured in terms of three sub-objectives which relate to the general objective. These sub-objectives are:

1. The student alters his consumer behavior when he recognizes the need for change through identifying the varying influences which effect his philosophy of decision-making.
2. The student recognizes satisfactions which come from his consumer behavior and shows empathy for others who make decisions different from his as a result of understanding the varying influences which effect his personal values and goals.
3. The student demonstrates he can use current resources to meet his needs and wants in a responsible and legal manner as a result of his understanding of human and material resources which influence consumer behavior.

Consumer behavior determinants have a number of implications for teachers of vocational agriculture. In some cases teachers have assumed that consumer behavior remained the same over the years and that adjustments in production and services were not needed. The concept that the farmer is both a producer and a consumer is also brought out in this unit. Consideration of this idea provides an opportunity for students to discuss their own behavior as consumers as well as the behavior of those whom they would sell their products to.

The major idea here is that consumer information and product knowledge, can provide logical elements in the education of the individual and help him to make more intelligent choices.

This section should be of assistance to teachers in helping to bridge the gap between the previous section on the Economic System and the next section on Consumer Alternatives. Many of the concepts are especially appropriate at the 11th and 12th grade levels.


CONSUMER BEHAVIOR DETERMINANTS
MATERIAL
RESOURCES
HUMAN
VALUES/GOALS
DECISION MAKING PHILOSOPHY

A TRANSPARENCY MASTER

Use this page as a transparency master for overhead projection.

Source: "Consumer Education Guide for Ohio,
Grades K-12."
Ohio State Department of Education

CONSUMER BEHAVIOR DETERMINANTS

OBJECTIVE: The student alters his consumer behavior when he recognizes the need for change through identifying the varying influences which effect his philosophy of decision-making.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
A self analysis of his present buying behavior will permit the agriculture student to recognize his strengths and weaknesses as a buyer.	9-12	Have 3 students play the roles of (a) an accomplished salesman of farm machinery (b) a buyer of farm machinery who is influenced by emotional appeals and (c) a buyer who buys only on the basis of factual information. Following the presentation have the class identify the behavior determinants which influenced each buyer.	"Economics of Owning a Combine" Chapter IV, "Combines and Combining" Ohio Agricultural Education Service.
		Have the students complete a self-analysis rating sheet of their buying skill. This will show them how they might react when buying goods.	
		Have students select ads such as for tractors and discuss the important facts given. Make a comparison of what each student thinks is important.	Agricultural Magazines.
The buying behavior of students as well as all consumers is affected by their experiences, problems, and emotions.	9-12	Set up a classroom market where students can buy a wide range of agriculturally related goods. Examples might include dairy cows, tractors, fertilizer, a home freezer, and a sports car. Have students explain why they selected those items based on factors such as values, activities, wants, needs, and goals.	Farm Advertisements in Newspapers.
		Have students set immediate, intermediate, and long range goals for community service, education, production efficiency, income, etc.	"Agricultural Production Curriculum Guide", p. 93. Ohio Agricultural Education Service.
		Have an agri-business salesman in class to discuss wants, needs, problems, experience and emotions as they affect the buyer.	

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
The agricultural student changes his buying behavior which is determined by such factors as goals, wants, needs, experiences, problems, and emotions when he recognizes the affect these factors have on reaching his goals.	9-12	Have students "shop" for agricultural supplies or goods and analyze the salesman's approach to them. Have a class discussion on each person's findings. Discuss a film strip on advertising. Have each student fill in the following chart for himself.	"In Answer to A Need" American Advertising Federation.

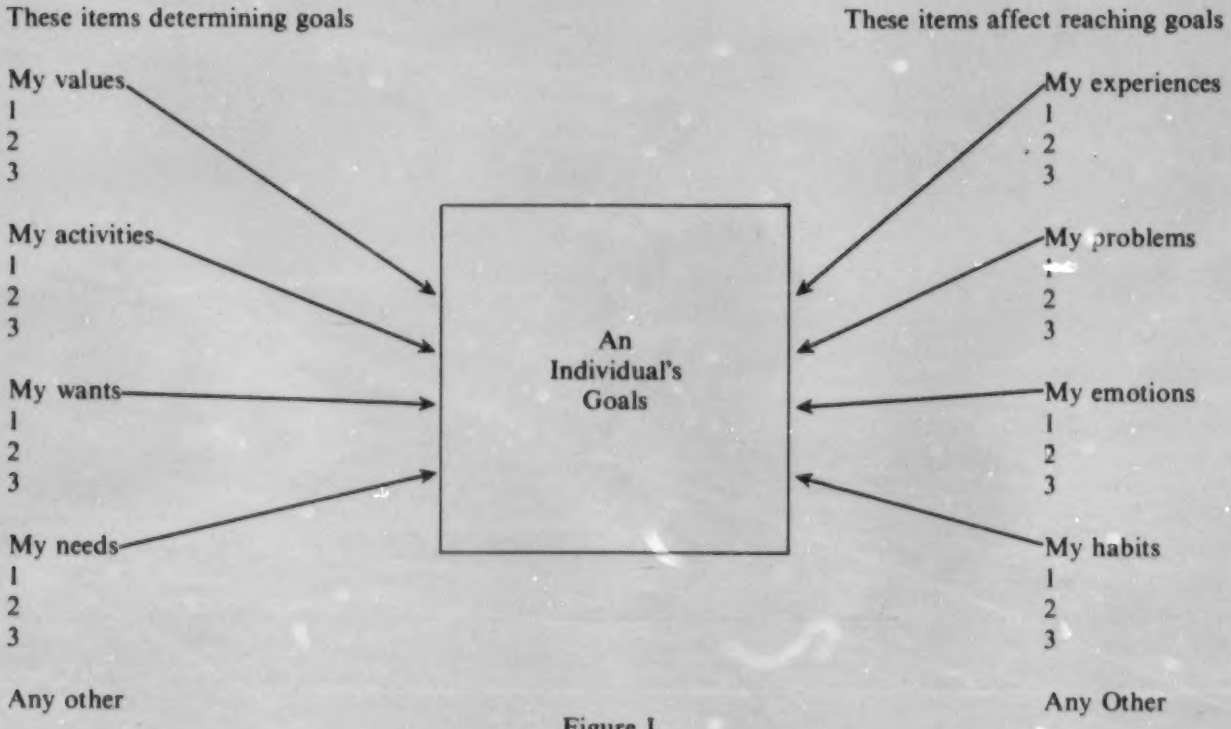


Figure I
Factors Influencing Goals

CONSUMER BEHAVIOR DETERMINANTS

OBJECTIVES: The student demonstrates he can use his current resources to meet his needs and wants in a responsible manner as a result of his understanding of the human and material resources which influence consumer behavior.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Agricultural students consumer behavior is influenced by their material, human and marketing resources.	9-12	Have students list their personal resources and discuss how each person's resources are different. Then have them list and discuss the material and marketing resources which are available to them. Have students compare the resources of people working in agriculture. For example, the young and old. There may be a difference in energy, time put in the job, talents, knowledge of the operation and new techniques, and skill. Invite a young manager or owner to the class to explain what he plans to do with his business and then have an older person, who may not have children in the business, explain his business plans. Have a promotion man from an area business discuss with the class the resources they have available to help the customers. He could explain the information they present in advertising.	
Agricultural students can meet their needs and wants through an understanding of the optimum use of their resources.	9-12	This is a good unit for team teaching with distributive education. Both teachers may participate in large group lectures followed by small group discussions and a final large group session to summarize the unit. Discuss the filmstrip.	A filmstrip "Role of Consumers" National Consumer Finance Association.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
		Have the class develop an inventory form for their personal use in which they categorize their resources as material, human, and social. Have the class distinguish between tangible and intangible wants, consumer goods and capital goods as well as personal and economic services. Ask students to select examples of each of the above terms in the field of agriculture.	"Consumer Economic Problems" Warmke, et al, chapter 1.

CONSUMER BEHAVIOR DETERMINANTS

OBJECTIVE: The student recognizes satisfactions which come from his consumer behavior and shows empathy for others who make decisions different from his own as a result of understanding the varying influences which affect his personal values and goals.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
The agricultural student's personal values and goals are affected by identifying and understanding various influences such as his socio-economic level, customs, and psychological needs.	11-12	Have students discuss why some farmers maintain their buildings while others let theirs deteriorate. As an example some farmers keep buildings well painted, fences in good repair and the weeds mowed while others will maintain the buildings and fence just enough to get by even though the business is profitable. Have students discuss the statement—"an individuals values might be reflected by the kind of car he drives, friends he has, and amount of time spent on income procurement." Ask students to discuss the value system inherent to a so-called middle class ethnic. Have the class discuss the sources of ethnic and class status.	"Consumer Education Curriculum Guide for Ohio," K-12, p. 40. Ohio Ohio Department of Education.
Agricultural students may buy items or services which they do not really want because of their peer group or social status and therefore their personal goals may never be reached.	11-12	Develop a money use game where each student is given a certain amount of money and several real alternatives as to what he might buy. The student would be able to buy items which might be popular or items which would help him make money in his farming operations. Have the student develop a list of items he thinks his parents would like for him to have; one his peers would like for him; and another list which he would like. Have the school guidance counselor talk with the class in terms of social and psychological factors of decision making.	"You Are A Consumer of Clothing," Chapter 4, Garrett and Metzen, pp. 46-63.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
The agricultural student realizes satisfaction from his buying behavior as a result of understanding the influencing factors.	11 or 12	Ask students to interview agriculturalists of different stages in the life cycle to discuss their changes in values and goals and how these have affected their consumer behavior. As an example: young and adult farmers, young and experienced agri-business men, single and married people and young, middle-aged and older parents.	

ROLES, RIGHTS AND RESPONSIBILITIES

The overall objective of this section is:

The student will recognize the rights and responsibilities of consumers when buying and using goods and services, and will exercise these rights and accept these responsibilities when assuming his multiple roles.

This is a broad and important area and these sub-objectives are listed as essential to reaching the overall objective:

1. The student identifies the roles of family members as consumers to the extent that he realizes the consumer is the final determiner of what is produced in the market place.
2. The student identifies and contributes as a producing member of the community.
3. The student differentiates among the roles that individuals assume as good citizens and recognizes how these roles influence himself, his family, and society.
4. The student makes informed choices so he can compare goods and services and select the alternatives which meet his needs.
5. The student communicates to proper sources documented complaints and suggestions of consumer interest.
6. The student identifies quality of goods and services that endanger life or safety and demonstrates his ability to select and use products which are based on safety features.
7. The student analyzes and uses information published by agencies and businesses when making consumer decisions.
8. The student identifies and uses the aid and protection afforded the consumer by business, government and independent organizations.

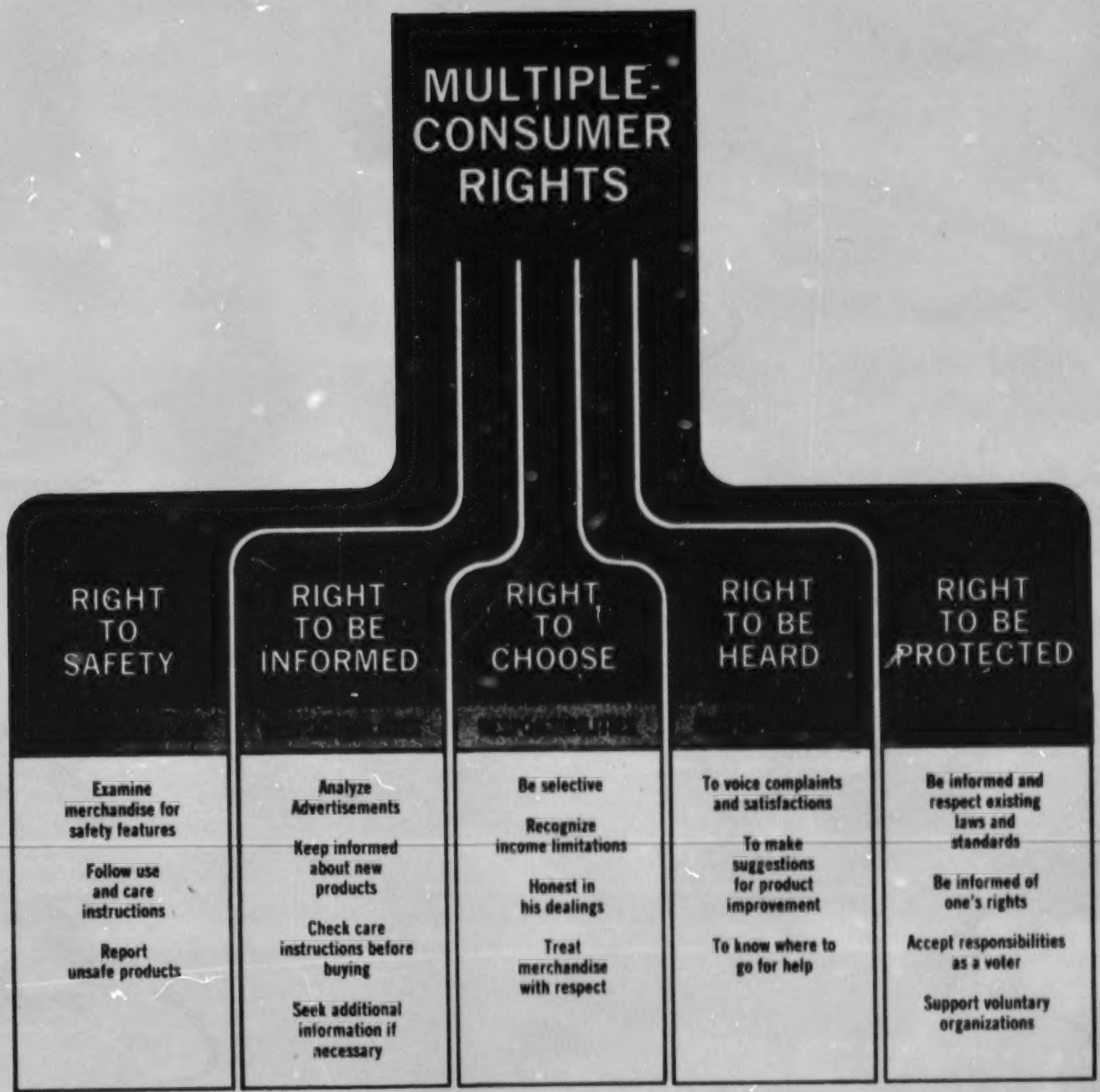
This unit contains many important concepts which needs to be taught in vocational agriculture classes. Among these are the concept of the farmers responsibility as a producer of high quality, safe, palatable food. The concepts of the responsibility of the agri-business man for providing the needed services and that comparison shopping is important to those in agriculture must also be considered.

Several concepts in this unit deal with the farmer and agri-businessman as citizens of the community, and detail their responsibilities in community activities and services.

Of increasing importance to the agricultural sector are concepts which deal with government regulation of agricultural production such as provided by the Ohio Pesticide Act.

Students who became acquainted with and understand these concepts are likely to be more intelligent producers and consumers as they contribute to the total economy of the nation.

RIGHTS AND RESPONSIBILITIES


MULTIPLE-CONSUMER RIGHTS
RIGHT TO SAFETY
Examine merchandise for safety features
Follow use and care instructions
Report unsafe products
RIGHT TO BE INFORMED
Analyze Advertisements
Keep informed about new products
Check care instructions before buying
Seek additional information if necessary
RIGHT TO CHOOSE
Be selective
Recognize income limitations
Honest in his dealings
Treat merchandise with respect
RIGHT TO BE HEARD
To voice complaints and satisfactions
To make suggestions for product improvement
To know where to go for help
RIGHT TO BE PROTECTED
Be informed and respect existing laws and standards
Be informed of one's rights
Accept responsibilities as a voter
Support voluntary organizations

A TRANSPARENCY MASTER

Use this page as a transparency master for overhead projection.

Source: "Consumer Education Guide for Ohio, Grades K-12."
Ohio State Department of Education

ROLES, RIGHTS, AND RESPONSIBILITIES

OBJECTIVES: The student identifies the roles of family members as consumers to the extent that he realizes the consumer is the final determiner of what is produced in the marketplace.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Consumer preference greatly influences the kinds and quality of foods produced by Ohio farmers.	9	Have students compare 1941 and 1971 consumer preferences for milk, pork cuts, eggs, chicken and vegetables. Students tour a packing plant and observe the grading of market hogs and see the dressed carcasses on the rail.	
		Secure some pork chops of various grades for class evaluation. Compare cut out results of the swine evaluation center.	"Livestock Marketing" Ohio Agricultural Education Service.
		Show the filmstrip "Role of Consumers."	National Consumer Finance Association.
Farmers tend to buy crop varieties that produce high yields of high quality grain and forage.	10	Have Vo-Ag students compare test plots on the school farm or land laboratory.	Local Seed Producer.
		Tour an OARDC Branch.	OARDC
		Visit a local hybrid seed producer.	
Soil tests and plant tissue tests guide farmers in buying the right fertilizers.	10	Have students evaluate a soil test and recommend the amount and kind of fertilizer needed.	"How to take a Soil Test." Ohio Extension Service.
		Conduct a field trip to a soil testing laboratory.	
		Make a plant tissue test using a plant tissue testing kit.	
Demonstrations often help in choosing equipment before purchase.		Farm equipment can be observed operating under real field conditions at the O.S.U. Farm Science Review.	Agricultural Engineers.
		Implement dealers demonstrate tractors and farm equipment at field days and on individual's farms.	Machinery Dealers.
Agricultural consumers should do comparison shopping before buying.	11-12	Have the class price several articles at different places and compare prices. Use Consumers Digest's "Price Buying Directory" to practice selection.	"Price Buying Diectory" by Consumers Digest.

ROLES, RIGHTS AND RESPONSIBILITIES

OBJECTIVE: The student identifies and contributes as a producing member of the community.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Agriculture is one of the essential industries in America.	9-12	Have students develop a display to be used at a vocational open house, a National FFA week exhibit, County or Ohio State Fair on the value of agricultural products produced by the farmer and the overall importance of agri-business.	"Facts on Farming." Department of Agricultural Education, Ohio State University.
		Students may list the products produced by the farmer and discuss the importance of these products. Show the film "Dynamic Careers Through Agriculture".	"Food For Us All", 1969 USDA Yearbook of Agriculture. Farm Film Foundation
The consuming public demands an increasing amount of quality food at a reasonable cost.	9-12	Discuss the increasing population in the U.S. and the world, and its affect upon the demand for farm products. Show efficiency of the American farmers using these examples: In 1971 a farmer feeds himself and 45 others. U.S. farm production has increased by 250% per man hour during the last 15 years.	"Farm Management Guide" Doane's Agricultural Service.
A large segment of the labor force is engaged in agri-business production.	9-12	Develop a chart showing the overall importance of agri-business, i.e. 5% of our population is engaged in agricultural production but approximately 30% of the total labor force is engaged in the industrial processing and marketing of materials for agricultural production and the products of agriculture.	"Food For Us All" 1969 USDA Yearbook of Agriculture. "Agricultural Supplies Business and Service" Unit 1 Ohio Agricultural Education Service.
Agricultural production is a highly specialized business.	11-12	Have students make a comparison of different types of farming such as: beef cattle, dairy and grain farms. This comparison should include capital requirements, operating costs, cash operating expenses, and family farm income.	Ohio Agricultural Statistics (1970) Department of Agricultural Economics, O.S.U. Ohio's Agriculture. Bulletin 407, p. 7, Cooperative Extension Service, O.S.U.

ROLES, RIGHTS AND RESPONSIBILITIES

OBJECTIVES: The student differentiates among the roles that individuals assume as good citizens and recognizes how these roles influence himself, his family, and society.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
The farmer who exercises his responsibilities as a producer fulfills his role as a consumer-citizen.	9-12	Have students develop a list of reasons why farmers need to exercise great care in the use of herbicides, insecticides, pesticides, and fungicides in the production of food; to practice strict sanitation in food production and in producing the highest quality food possible.	"Food For Us All" 1969 USDA Yearbook of Agriculture.
The agriculture producer adjusts his production practices so as to produce wholesome food to meet the needs of the consuming public.	9-12	Class panel discussion of: Sanitation standards of milk production; removal of stilbestrol before slaughter; day limitations for using forages after spraying.	"Agri-Business Supplies and Services—Unit 11, Marketing Agricultural Products" Ohio Agricultural Education Service.
Successful agriculturists play active roles as citizens by participating in community activities.	9-12 Young & Adult Farmers	Have students join and participate in agricultural organizations.	Film, "A Citizen Participates," McGraw-Hill.
		Demonstrate sincerity by voting.	Film, "Forward FFA" National FFA Service.
		Have agriculture students prepare a list of responsibilities assumed by citizens in their communities.	
		Arrange for all students to study and participate in parliamentary procedure training.	"Helps in Mastering Parliamentary Procedure" Stewart.

ROLES, RIGHTS AND RESPONSIBILITIES

OBJECTIVE: The student makes informed choices so that he can compare goods and services and select the alternatives which meet his needs.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Persons can learn to be competent comparative shoppers for agricultural goods and services.	11-12	Select a number of articles to be bought. Have students get prices on them from different sources and compare prices.	"A Department Store in the Classroom." Sears.—Page 3.
		Set up a class problem of allowing each student $1,000 to spend for themselves. Have them report to the class the things that they were able to buy with the money.	
		Have them list other things that they would like to have purchased but didn't because they were lower priority wants.	
The agricultural consumer should purchase goods and services which contribute to a better rural environment.	10	Help the class select a machine and by using the operators manual decide upon proper care and use of the machine.	Various operators manuals.
		Discuss with the class the power of the consumer in determining what is produced for the market. Each year we dispose of 55 billion cans, 26 million bottles and seven million autos. When we buy throw away items we cast a vote for the producer to produce more.	American Vocational Journal May, 1971. Pages 22, 23, and 26.

ROLES, RIGHTS AND RESPONSIBILITIES

OBJECTIVE: The student communicates to proper souces documented complaints and suggestions of consumer interest.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Consumers have sometimes been victimized by unfair prices of advertisers, salesmen and retailers.	11-12	Have students prepare examples of the ways consumers are short changed in the market place including: food quackery, health, miracle and organic foods; swindles; easy credit; inflated - interest; credit cards; inferior quality; giveaways; and throwaway packaging.	"The Market Place". Changing Times Educational Services.
Public interest and cooperation are necessary for promotion and enforcement of laws which protect the consumer.	11-12	Have students prepare a list of people and agencies where complaints may be filed, such as: Better Business Bureau and the manufacturer. Have students cite examples of products which have been improved in quality through suggestions and consumer complaints.	"Consumer Economics" Wilhelm Heimerl. "The Economic Reference Book" 1970, Paradis.
Consumers should take advantage of the protection afforded by warranties and guarantees.	11-12	Students should study and discuss warranties and how they offer recourse to the consumer. A comparison of an adequate and an inadequate guarantee on an electric motor should be made by an agricultural mechanics class.	
Agricultural consumers may be the victims of unfair practices. Students should make surveys and and report on examples of tricks used to mislead the consumer.	11-12	Students should study the laws for consumer protection such as "Truth in Lending," "Truth in Packaging" and "Truth in Advertising." Students compare prices at the super market of the same products at different times of the week and different times of the year.	"The Consumer" Gerald Leinrand "The Consuming Public" Edited by Grant S. McClellan. "Partners in Progress Co-op-Four ways of doing business in America."

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Farmers have a voice in the operation of their businesses through farmer cooperatives.		Have the class study cooperatives and their operation. Have the class visit a purchasing cooperative and see how it works, such as Landmark, Miami Valley Milk Producers, or a Farmer's Exchange elevator. Have students plan and operate a purchasing cooperative commodity for the purchase of fertilizer, seed, or gasoline. Students should elect the board of directors, decide policy, hire employees and operate the business as efficiently as possible.	Co-op Handbook.

ROLES, RIGHTS AND RESPONSIBILITIES

OBJECTIVE: The student identifies qualities of goods and services that endanger life or safety and demonstrates his ability to select and use products which are based on safety features.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Agriculture is one of the more hazardous occupations.	9-12	Develop a check list of hazards that confront the farmer. Compare the hazards of farming with other occupations such as: Mining, construction, and manufacturing.	"Let's Curb Farm Fatalities" Safety Slide Set—Agricultural Education Service, OSU.
		Study and complete appropriate sections of the "4-H Tractor Certification Program for Hazardous Occupations" P 3-8	Ohio Cooperative Extension, O.S.U. "Tractor Safety on the farm" P 30-36. "Tractor Safety on the Highway" P 37-43. "Safe Use of Farm Machinery" P 51-55.
The selection of tractors and farm equipment with adequate safety features contributes to farm safety.	11-12	Study safety sections in the operator's manuals. Take a field trip to the O.S.U. Farm Science Review to observe tractors, and farm machinery of various makes under actual field conditions. Have students check the safety features of various makes.	Operators Manuals from Machinery Dealers.
		Borrow a piece of equipment from an implement dealer and by following the use and care instructions ing the instructions set up and get it ready for use.	Implement Dealer. "4-H Tractor Certification Program for Hazardous Occupations in Agriculture." Cooperative Extension Service, O.S.U.
Unsafe products or equip- should be identified and reported.	9-12	Have students compile a list of hazardous products and/or equipment that their family has purchased or used.	
		Write a sample letter to the State Department of Agriculture Laboratories, Reynoldsburg, Ohio.	

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
		Have students prepare a sample letter to be sent to an implement dealer reporting unsatisfactory condition of a piece of machinery.	
Safe use of chemicals enable the farmer to produce ample amounts of food and fiber.	10	Discuss with the class the importance of chemicals as a tool of agricultural production.	"Agricultural Chemicals Manual"-Agricultural Education Service, OSU
		Have the class research and list the safeguards that farmers must follow in order to produce safe food without polluting the environment.	"Ohio's Environment" Bureau of Environmental Health. Ohio Department of Health.
		Make available to the student copies of the new farm pesticide law and discuss it's implications for the farmer.	"Pesticides and the Environment" Dr. A.C. Waldron Ohio Cooperative Extension Service.
		Keep students informed about new developments in chemicals and their use on the farm.	"Weed Control-Cultural and Chemical" Agricultural Eduaction Service, OSU.
			"Agricultural Chemicals Newsletter" Dr. A. C. Waldron Ohio Cooperative Extension Service.
Community action should supplement individual attention to safety practices in agriculture.	9-10	Have students make a community safety survey, locating and marking. hazards.	"Consumers All" the 1965 Yearbook of Agriculture.
		Discuss the tremendous cost of farm and home accidents.	
		Secure consumer reports and discuss with the class selection of trucks, tractors and farm machinery according to consumer reports.	"Consumers Reports". Current Issues.

ROLES, RIGHTS AND RESPONSIBILITIES

OBJECTIVE: The student analyzes and uses information published by agencies and businesses when making consumer decisions.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
The agricultural consumer is faced with many varieties of advertising and many new products each year, making it necessary to get the facts before buying.	11-12	Have each student collect ten examples of advertising of a similar agriculture product and lead a discussion of: size of advertisement, amount of printing, use of color, consequences if not purchased, validity of information, and overall impact.	Agricultural Service and Supplies, Unit 6. Ohio Agricultural Education Service, OSU.
		Conduct a student discussion on the impact of television advertising.	
		Have each student evaluate a new agricultural product as compared to the product that is being replaced and discuss: improved capacity, improved quality, appearance change, planned obsolescence, price change, additional benefits, drawbacks compared to older product, relationship of extra goods or services received to additional cost incurred.	"Consumer Reports" Current Issues.
		Subscribe to and use "Consumer Reports" in class study.	"Consumer Reports" Current Issues.
The farmer-consumer must carefully follow directions and often make changes in production practices as he uses new feeds, fertilizer, and equipment	10	Have students evaluate the sources of nitrogen fertilizer according to: price per pound of actual N., percent of immediate availability, method of application, suitable temperature (Spring or Fall application), pH required, where fertilizer is bought, transportation freight cost, and time of application.	Local Elevator Operator. Farmers Exchange Cooperative.
		Have students consider two products that will produce similar results but are entirely different in method. Airplane glue versus epoxy glue versus contact cement; chisel plow versus moldboard plow; amiben granules versus amiben liquid.	

ROLES, RIGHTS AND RESPONSIBILITIES

OBJECTIVE: The student identifies and uses the aid and protection afforded the consumer by business, government and independent organizations.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Agricultural consumers are often protected from poor quality goods and services by guarantees and warranties.	11-12	Discuss the terms stated in example guarantees and warranties.	
		Have students list agricultural products that should carry guarantees when purchased.	"A Department Store in the Classroom" *Sears*, Page 10.
		Help the class to analyze a guarantee on a tractor tire identifying those hazards covered and those not covered by the warranty.	
Some legal protection of the farmer-consumer is provided by various public agencies.	11-12	Students should: Make a list of sources/agencies that offer some protection to the consumer. (a) Weights and Measures (b) Feed and Fertilizer Standards (c) Truth in Packaging Legislation (d) Fair Packaging and Labeling Act, 1967	"The Consuming Public" edited by Grant S. McClellan.
		Compare the label on a sack of soybean oil meal with the requirements of the Ohio Department of Agriculture for labeling feeds.	
Agriculture workers under 16 yrs. of age are prohibited from operating hazardous machinery without appropriate instruction.	11-12	Teach students the provisions of the current laws on operation of farm machinery by minors.	
		Have student enroll and complete the 4-H Tractor certification program for hazardous occupations in agriculture.	"Tractor Certification" 4-H Circular 283, Ohio Cooperative Extension service O.S.U.
Zoning laws protects the farm owner from loss of property value.		Discuss how county zoning can be a service to the farmer.	The zoning commission of the county.
		Use a member of the county zoning commission as a resource person in discussing current problems in rural zoning.	

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Farmers have an important role in performing conservation practices which protect natural resources.	11-12	Help the class identify and list soil conservation practices used on the home farms.	Vo.-Ag. Land and Soil Judging Scorecard.
		Have students list water conservation practices used in the county.	"Ohio's Environment" Ohio Department of Health.
		Hold a student debate on the role of conservation relating to pollution and ecological problems.	
Agricultural producers, processors and marketers can often protect against loss through insurance programs.	11-12	Have students research and report on various types of insurance available to agricultural workers including life, health, workmen's compensation, crop, fire, liability, and debt insurance.	"Agriculture Sales and Service" Ohio Curriculum Material Unit 15, Ohio Agricultural Education Service.
		Discuss the characteristics and costs of each.	
Consumers of some farm products are protected by government inspections, grades and standards.	9-12	Write to various protection services for materials on government regulations and standards that protect the consumer of agricultural products. Have class discussions on how these regulations affect quality.	Animal Health Division, 121 East State Street, Columbus, Ohio.
			Consumer Protection Programs. Meat and Poultry, 85 Marconi St., Columbus, Ohio. Food and Nutrition Service, 121 E. State St., Columbus, Ohio.
			County Cooperative Extension Service, Local Veterinarian.

COMMUNITY RESOURCES

The overall objective of this unit is stated as follows:

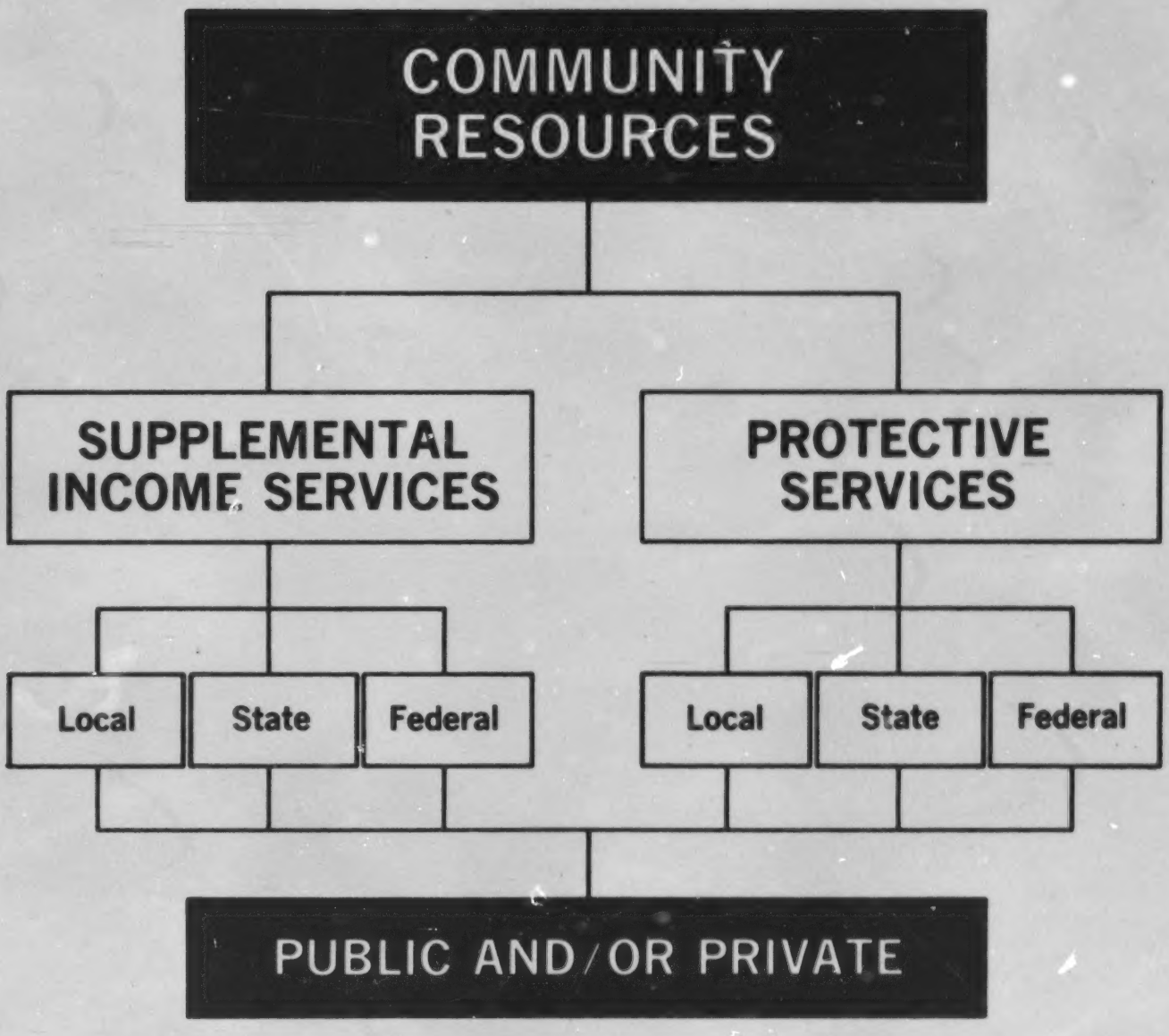
The student is knowledgeable about community resources and identifies those which can supplement an individual's income or satisfactions, and those which can contribute to his protection, his rights, and his environments to the extent that he can make use of or assist in the activities involved in these services when necessary or desirable.

Two contributing objectives are listed under this overall objective:

1. The student is knowledgeable about community resources and identifies those which can supplement an individual's income or satisfactions when necessary or desirable.
2. The student identifies the protective agencies which contribute to his protection, his rights, and his environment, enabling him to be knowledgeable about the services to the extent he can make use of or assist in the activities involved in these services.

As the above objectives show, this unit helps the student to take stock of the many resources available to him "right around home." Among the concepts included in this unit are the diversity and extent of community resources, the values of participation in community organization, the advantages which come to those who participate, and the educational opportunities available in the field of agriculture. An important aspect of agricultural education which has been sometimes neglected, is consideration of the voice of agriculture in the legislative process. The section dealing with protective agencies gives the student a new insight into the many agencies which provide for his protection as an agricultural consumer as well as those which regulate him as an agri-businessman or farmer.

This unit should help the student of agriculture to understand that as more and more people live together the individual's protection becomes increasingly important. It also helps the student to choose and make use of those services which will provide him better protection as a consumer.


COMMUNITY RESOURCES
SUPPLEMENTAL INCOME SERVICES
PROTECTIVE SERVICES
Local
State
Federal
Local
State
Federal
PUBLIC AND/OR PRIVATE

65

A TRANSPARENCY MASTER

Use this page as a transparency master for overhead projection.

Source: "Consumer Education Guide for Ohio, Grades K-12." Ohio State Department of Education

COMMUNITY RESOURCES

OBJECTIVE: The student is knowledgeable about community resources and identifies those which can supplement an individual's income or satisfactions when necessary or desirable.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Community resources involve a wide range of organizations, agencies, and individuals which can provide a valuable source of information and assistance for those involved in agriculture.	9-12	Have students list resources within the community including individuals, agencies, organizations, businesses, and industries. Analyze each of the above for type and degree of assistance available.	Local Chambers of Commerce. County Planning Commissions.
		View and discuss a motion picture on participation in public affairs.	"Beyond These Doors" Bell Telephone Company.
Participation in agriculturally oriented youth organizations will help agricultural students identify with and develop an understanding of the value and workings of community organizations.	9-12	All agricultural students participate actively in their FFA Chapter.	The FFA Manual.
		Encourage active participation in other organizations, i.e. 4-H Clubs, Farm Bureau Youth Council, Jr. Fair Board, etc.	Local Youth Organizations.
Participation in agricultural organizations and associations can serve to improve agricultural income.	12 & Adult Ed.	List agricultural organizations dealing with purchasing and marketing of agricultural supplies and commodities and identify ways in which those participating can benefit.	
		Conduct a tour of a farm cooperative.	
Community resources are available to assist farm families and individuals in coping with specific social emergencies.	10-11 Adults	Have the class survey social agencies in the community and identify assistance offered which can benefit rural families and others. Examples: Legal Aid, Family Counseling, Welfare, Mental Health, etc.	
Individual and personal satisfaction often lies in developing friendship groups and visiting patterns within a group of persons of similar interests; thus participation in agriculturally oriented community groups and organizations can be important.	9-12	Help students to investigate social goals of community organizations for farm families and individuals, i.e., Young Farmers, Couples Club, Grange, Farm Bureau Council, Breed Assoc., etc.	Handbooks, Constitutions, and plans of local groups.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Local resources within the community can provide the means for gaining needed skills and knowledge for entry jobs in agriculture and for improving job skills for advancement in agricultural employment.	10 & 14 Adults	Help students compile a calendar of events and activities currently offered to provide skill training or improved understanding of agricultural practices, i.e., Cooperative Extension, Adult Ag.-Ed. offerings, twilight tours, trips, etc.	Request names on mailing lists.
State and Federal agencies provide both information and financial assistance for farmers and others in specified agricultural enterprises, i.e., A. Educational B. Credit and Money Management C. Inspection and protective services D. Environmental Control	12 & Adults	Invite speakers to the classroom from Extension, F.H.A., P.C.A., A.S.C., S.C.S., and Natural Resources to explain various farm programs and discuss types of assistance offered.	Representatives from State or Federal Agencies.
Community organizations, through state and federal affiliates, provide farmers with a voice in the legislative process.	11-12 Adults	Have students meet with legislative representatives from various organizations to determine strengths and weaknesses of lobbies.	Farm Bureau Policy Guide Ohio Farm Bureau.
		Arrange for students to meet with county officials and legislators to develop an understanding of legislative processes.	Community Legitimizers and Decision-Makers.
		Help students to develop a guide to community resources listing each agency or organization with a brief descriptive paragraph explaining major goals and functions of each. This activity could logically be a cooperative venture with classes in government, social studies, and English.	

COMMUNITY RESOURCES

OBJECTIVES: The student identifies the protective agencies with contribute to his protection, his rights, and his environment, enabling him to be knowledgeable about the services to the extent that he can make use of or assist in the activities involved in these services.

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Persons and families engaged in agriculture have the same protective community resources available as every other segment of the society.	9-10 & Adults	Have students compile lists of protective resources and give a brief description of service provided.	Planning Commission.
		Class visit to dairy plant, packing plant, or bakery to observe firsthand the sanitation required to meet standards. Upon return, draw comparisons using the industry problems and sanitation inspection expectations.	"The Consuming Public"—McClelland. "Mail Fraud," Chief Postal Inspector, Washington, D.C.
		Develop grafittis on local protective resources.	
		Representatives of protective agencies to meet with class for a panel discussion on ways the individual is affected by their service.	
		Discuss a film strip on pesticides.	"Facts about Pesticides," National Agricultural Chemicals Association.
		Divide the class into student teams to interview local businessmen, famers, and citizens and determine views held regarding protective resources, i.e., degree of effectiveness, and future needs.	
		Arrange a State Highway Patrol visit to class, hold discussion on jurisdiction, major problems and how citizens help or hiner.	
		Class trip to observe State/Federal inspections of foodstuff and/or plant material at source of inspection.	
		Students in teams of 3-4 each to design a display for bulletin board or other suitable area in school or community on general protective services. Each display to remain in place 2-3 weeks.	

Concepts	Grade Level	Suggested Learning and Evaluation Experiences	Suggested Resources
Many protective agencies regulating the production, processing and marketing of agricultural supplies have a direct effect on the farmer and the agri-business worker.		Divide class into small groups. Assign each group a specific agency to research and report back to the class. Some protective agencies which could be included are: Food and Drug Administration, Bureau of Standards and H.E.W.	Weights and Measures Milk Inspection Meat Inspection Ohio Health Department and Ohio Department of Agriculture.
		Have the class role-play a situation involving a dairy farmer, farm hand, processor, and an inspector for the FDA finding an amount of malathion in milk higher than levels of tolerance.	
Some agencies serving agriculture may have a dual role—protective or restrictive—depending upon the position of the person or enterprise involved.	12 & Adults	Have the class identify examples of duality in agencies—divide class into several teams to debate pros and cons of "protective" as opposed to "restrictive" functions of these agencies.	
		Examine functions of various agencies commonly considered protective—have class consider the question: Could these be restrictive to the producer or processor?	U.S. Food and Drug Administration.
		Students interview successful farmers and other agricultural businessmen in the community to determine their reactions to the protective agencies as a consumer vs. producer/processor.	
		Help the class prepare an exhibit for use in school, shopping area or county fair, and/or presentation for use with civic groups pertaining to ecology or environmental controls.	

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Helping Families with Their Money. Home Economics Report No. 2
National School Lunch Program, PA 19, 1965
Toward the New U.S.D.A. No. 341, 1970
U.S.D.A. Food Donation, P A 667, 1965
Consumer Price Index, 1967
Social Security Programs in the United States. $.55
Social Security Information for Young Families. $.15
Your Medicare Handbook. $.40
How FDA Works for You. 1968. Free
What the FDA Does for the Food Shopper. 1968. Free

U.S. Department of Labor. Washington, D. C. 20402

Occupational Outlook Handbook. Bulletin 1550, 1969

PERIODICALS

Changing Times, The Kiplinger Service for Families. The Kiplinger Magazine, Washington Editors, Inc., Editors Park, Maryland 20782

Consumer Reports, Consumers Union of the United States, Inc., 256 Washington Street, Mt. Vernon, New York 10550. Monthly.

Newsletter: Agricultural Chemicals
Pesticides/Feed Additives/Prophlylatic Drugs

FILMS, FILMSTRIPS AND SLIDES

SLIDES:

Ohio Cooperative Extension Service, The Ohio State University, Columbus, Ohio 43210.

Miscues With Machines. 30 slides. Color.
What Do You Fall For? 30 slides. Color.
Drive to Live. 30 slides. Color.
Helping Hands—What Would You Do? 30 slides. Color.
House Traps. 30 slides. Color.

FILMSTRIPS:

National Consumer Finance Association, 1000 Sixteenth Street, Northwest, Washington, D.C. 20036

Role of Consumers

Household Finance Corporation, Prudential Plaza, Chicago, Illinois

You, The Spender
Your Money and You
Your World and Money

Institute of Life Insurance, 561 Hillgrove Avenue, LaGrange, Ill. 60625.

Automobile Insurance. 52 frames, color. 18mm. color, sound.
Directing Your Dollars. 52 frames, color.
Patterns for protection. 15 min. color, sound.

Ohio Agricultural Education Curriculum Materials Service, The Ohio State University.

Using Pre-emergence Herbicides. 45 frames, color. (No. 797)

MOTION PICTURES

American Bankers Assoc., Public Relations Committee, Park Avenue, New York 10016.

Paying by Check. 14½ min. Color

Your Town. 14½ min. Color

Association Films, Inc., 600 Madison Avenue, New York, New York 10022

A Reason for Confidence: How the Food and Drug Act Works.

Personal Financial Planning. 11 min. Color, loan.

The Wise Use of Credit. 11 min. Color, loan.

Better Business Bureau, 112 East 10th Street, Kansas City, Missouri—430 N. Michigan Avenue, Chicago, Illinois

The Better Business Story. 27½ min. Color.

Too Good to be True. 20 min. Color

Farm Film Foundation, 1425 H Street, Northwest, Washington, D.C. 20005

Dynamic Careers Through Agriculture.

McGraw Hill Book Company, New York, New York

A Citizen Participates.

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APPENDIX

TEACHING PLANS FOR CONSUMER EDUCATION UNITS IN VOCATIONAL AGRICULTURE

When beginning to teach a new area it oftens helps to exchange ideas with another experienced in this kind of teaching. Here are seven lesson plans prepared by the vocational agriculture teachers who participated in the Consumer Education Workshop which should serve this purpose. Each of these teachers has taught units of consumer education during the past year. These plans reflect some of their experiences as they began teaching in this area.

Considerable diversity will be noticed among these plans. However, there is value in diversity. Each of these teachers developed a plan for a different unit of consumer education. Some were developed for first year students and some were developed for adults and young famers. There is also diversity in the agricultural subject matter to which consumer education is related in these various plans and even more diversity appears in the procedures which these teachers used to bring about student understanding and involvement. It is anticipated that these examples will stimulate many additional ideas and innovations among those who develop plans for their own teaching.

There are a number of common approaches which have been used in these plans which are believed desirable in teaching consumer education. Considerable care has been taken by these teachers to state objectives in terms of student performance, and to center the teaching on problem situations of students. All plans show a wide variety of student activity, demonstrating the concern of these teachers for maximum student involvement. Many of the plans provide for opportunities to share responsibility with other teachers in the system when teaching consumer education.

Finally, all of the plans terminate with action oriented conclusions suggesting that students are to do something about consumer education in relation to their own lives.

These plans represent only a beginning in the teaching of consumer education and additional helps for teachers will be forthcoming as more and more teachers develop and share with others ways and means of teaching in this area.

Ralph J. Woodin,
Editor

A TEACHING PLAN ON AGRICULTURAL LEGISLATION AFFECTING CONSUMERS*

General objective of the teacher:

To develop student understanding of the means by which community organizations, through their state and federal affiliates, provide farmers and agri-businessmen with a voice in the legislative process.

Performance objectives for students:

After study of this unit students should be able to:

1. Define the need for collective action on agricultural legislation.
2. Identify the means by which agriculture may gain a representative voice in the legislative process.
3. Identify and explain the steps and processes through which an idea becomes a law.
4. Determine and identify those steps or stages in the lobbying process in which he can make an input.

Time required for teaching:

2 to 4 hours

Grade level:

Most appropriate for juniors or seniors as a part of the study of community resources and consumer education.

Introducting the unit:

The teacher can introduce this unit by raising relevant questions with the students about recent legislation which affects agriculture. The eighteen year old vote is a good example. He should encourage discussion from the class. One means of accomplishing this would be to start with a "hot" issue which students may have heard discussed by their parents such as the Ohio Pesticide Law or the regulation of strip mining, or with any current bill of broad general interest.

Some of the questions the teacher might ask in getting the class warmed up are:

1. How did this law come into being?
2. What is its affect upon farmers?
3. What laws are in the legislative "hopper" now that will affect farmers?
4. How could you influence whether or not these bills actually become laws?

Class Problem:

How can farmers and agri-business-men bring about desirable developments in agricultural legislation?

Class sub-problems:

1. What agricultural problems need to be met through new and improved legislation?
2. How can agriculture gain a stronger voice in the legislative process?
3. What are the procedures we may follow in helping develop appropriate legislation?
4. What experiences can students gain in legislative activities?

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* This unit on Consumer Legislation in Agriculture was developed by Roy F. Emerson of Burton, Ohio. Mr. Emerson is a teacher of agricultural business supply and service at Berkshire High School which is a part of the Chagrin Valley Cooperative Vocational District. A graduate of Garfield Heights High School, he spent two years in the U.S. Army. He received his bachelor's degree from Ohio State in 1951 and his masters in 1962. He has had additional graduate work at Colorado State University, Miami University and Youngstown State University. His work experience includes serving as a meat cutter for two years, as a Farm Bureau field representative for four years, as an Agricultural Extension Agent for twelve years, and as a vocational education teacher in Ashtabula County for four years.

A TEACHING PLAN ON AGRICULTURAL LEGISLATION AFFECTING CONSUMERS*—(Continued)

Accomplishing the objectives of the unit:

1. Discuss with the students the need for farmers to take a unified stand if they are to be effective in reaching legislators with their ideas and desires for needed legislation.

   1.1 *Population*—Have the class check the latest census of population and draw graphs of farm, rural non-farm, suburban, and urban populations. Contact the County Extension Agent for use of *County Long-Range Plans* which in most cases will provide information for charting trends in various areas of farming; full-time, part-time, part-time employed more than 100 days off the farm, etc.

   Raise the question as to the possibility that the overall populations' needs or opinions would reflect the needs or opinions of the agricultural community.

   1.2 *Zoning—Land Use Planning*—Have class members contact the county or regional planning commission and determine amounts of land set aside for residential, industrial, agricultural, and recreational use in the county.

   1.3 *Type of Enterprise Affects Legislation*—Is the major farming enterprise in the area livestock, grain or tourism? Is the livestock farmer affected by acreage allotments placed against the grain farmer? In what ways?

2. Discuss the organizations in which farmers may have a direct interest and outline how they function.

   2.1 Have representatives of farm organizations meet with the class. This may be done with one outside speaker or by involving several different people as a panel. If a panel is used the panel members should be instructed as to their purpose. The discussion should NOT become an arena for any organization to point out it's own superiority.

   2.2 Have students interview people in the community who are involved with farm organizations. This might be recorded on tape and brought back to the class to be used as a springboard for discussion.

   2.3 Use a transparency showing the organizational flow chart to help students visualize the processes by which policy is formed.

3. Have class study the pamphlet, "How a Bill Becomes a Law in Ohio" before inviting a legislator to meet with the class and discuss the legislative process.

   3.1 Involve the students in role-playing a situation with one serving as a legislator, one a farmer in favor of the farm program and one a farmer opposed to the farm program. Ask the students to consider how the legislator would meet these situations.

4. Involve the students as a class or as the F.F.A. Chapter in becoming actively involved and taking part in school government.

   4.1 Through the processes of school government the F.F.A. Chapter could take the leadership in organizing such actions as an Earth Day or School Environment Improvement.

   4.2 Students can be encouraged to take an active part in local issues pertaining to agriculture. They might be involved in writing letters to the editor, meeting with representatives of local governmental agencies, and encouraging the mayor or other local officials to issue proclamations and promote citizen action on such current issues as pollution and ecology.

Summary

Have the class summarize their work in agricultural legislation in terms of their roles and responsibilities during the next three years. They should also plan for activities in which they plan to engage as individuals as well as members of organizations.

A TEACHING PLAN ON PRICE DETERMINATION AS AFFECTED BY SUPPLY AND DEMAND*

General objective of the teacher:

To help students understand that in a free market the prices of commodities are generally determined by supply and demand.

Performance objectives for students:

1. Students compare present and past demand of agricultural commodities.
2. Students compare the demand of agricultural commodities over a period of years.
3. Students list factors which affect demand of agricultural commodities.
4. Students identify data which shows present and past supply of agricultural commodities.
5. Students compare the supply of agricultural commodities provided over a period of years.
6. Students list factors which affect supply of agricultural commodities.
7. Students associate supply and demand of an agricultural commodity as they affect the price of agricultural commodities.

Time required for teaching:

2 to 4 hours

Grade level:

For Juniors or Seniors as a part of the study of our economic system.

Introducing the unit:

In this instructional unit the students should become familiar with supply and demand, that supply and demand fluctuates with prices on commodities, and that supply and demand interact which generally determines the price of an agricultural commodity. So that the students may realize that all of them are directly affected by supply and demand of agricultural commodities, questions along the following lines might be asked.

1. Does the price on agricultural commodities ever change?
2. What are some farm products which you sell or farm supplies which you buy that do have fluctuating prices?
3. What are the extreme prices for the above mentioned commodities?
4. When do these prices change?
5. What are some sources for finding out just what the prices were of these agricultural commodities?
6. Why do prices change? (At this point use the activity on selling soft drinks that is listed in the agricultural curriculum guide for consumer education, in the section on price determination.)

Class Problem:

How does supply and demand affect the price of agricultural products in general and beef cattle in particular?

Teaching-Learning Activities

1. Each student should make an individual list of agricultural commodities which they buy or sell in large quanties. These should be related to their occupational experience program as much as possible.
2. Have students "brain-storm" to identify as many possible factors determining their prices for the past several years and also for each month for the last year as they can. Teacher must then supply any additional sources needed.

* The author of this unit is Dan E. Garver who is a teacher of production agriculture at Garaway High School in Tuscarawas County. Mr. Garver, a native of Holmes County, obtained his B.Sc. in Agriculture in 1966 from O.S.U. He received his Master's degree from the University of Arizona in 1969. His previous experience has included one year at Ridgewood High School in Coshocton County, two years at Miami Trace High School in Fayette County, and one year at Mesa High School at Mesa, Arizona.

A TEACHING PLAN ON PRICE DETERMINATION AS AFFECTED BY SUPPLY AND DEMAND—(Continued)

3. Students should identify several commodities that have had large annual price changes.
4. The class should develop a chart and a linear graph to show price changes of beef cattle over the past ten years and a linear graph to show monthly prices for last year. Prices of farm produced commodities can be found in U.S.D.A. Federal and State Extension publications. Specific source: AH300, *Handbook of Agricultural Charts*, U.S.D.A., 1965. *Seasonal Price Indexes of Beef Cattle in Illinois, 1955-64. Livestock and Meat Situation*, U.S.D.A.
5. Students may locate appropriate materials or sources of information for determining the amount of their commodity that was consumed or demanded in each of the last ten years and for each month of the last year. Use U.S.D.A. Federal, State, and County extension publications.
6. Students should prepare a linear graph showing annual supply and demand and the prices of beef cattle for the previous year. Similar graphs should be prepared for butcher hogs, eggs, corn, soybeans and wheat.
7. Students should locate appropriate materials or sources of information for determining the amount of their commodity that was produced or supplied for each of the last ten years and for each month for the previous year. National grain board and livestock reports and local stock exchange listed in newspaper. Use U.S.D.A. Federal,, State,, and County Extension publications.
8. Students should prepare linear graphs showing the above supplies and the prices for the respective years and months.
9. Divide class into two teams and have a debate on effect of supply and demand on prices of beef cattle.

   Sources—Ohio Cooperative Extension Service, 437, *How Prices are Determined, Consumer Economic Problems*, Warmke, Wyllie, Wilsen, Eyster, 665 pp., 1971.

Conclusions:

1. Beef cattle prices are largely determined by supply and demand.
2. When the price of most agricultural commodities is lowered there usually is more of that agricultural commodity demanded.
3. When more of an agricultural commodity is demanded the prices raise.
4. When the prices of an agricultural commodity raises there is more of that commodity produced.
5. When there is more of an agricultural commodity produced, the price on that commodity decreases.

General Conclusion:

The price of an agricultural commodity is generally determined by the amount of that commodity produced in relation to the amount of that commodity demanded.

A TEACHING PLAN ON ADJUSTING AGRICULTURAL PRODUCTION, SERVICES AND MARKETING TO CONSUMER DEMAND*

General objective of the teacher:

To guide students to understand that the consumer's wants, needs and desires must be considered by all persons engaged in agricultural occupations and that rapid adjustment to consumer needs must be made.

Performance objectives for students:

1. The students should be able to recognize and list different roles of a farmer.
2. The students should be able to list the wants of a consumer concerning his food purchases.
3. The students should be able to identify trends in consumer demands which are likely to continue into the future.
4. The students should be able to identify the changes in production that a farmer should make to meet future consumer demands.
5. The students should be able to apply the concept of changing consumer demands to several major agricultural enterprises.

Time required for teaching:

3 to 4 hours

Grade level:

Sophomore through senior years.
Suitable for a young farmer group with appropriate adaptations.

Introducing the unit:

The teacher may begin this unit by discussing the fact that a farmer during his lifetime fills many different roles in his community.

These questions should be raised: What is a farmer? What are the different "hats" a farmer wears that illustrates the many different parts he plays in his occupation?

Teacher should use a transparency overlay of chart on Page 27 of *Curriculum Guide for Ohio, K-12 Grades*, Ohio State Department of Education, 1970.

This unit lends itself well to team teaching by the teacher of home economics and the teacher of vocational agriculture. Classes may be combined for this discussion with both teachers making appropriate presentations.

Class Problem:

How should consumer wants, needs and desires be used in making changes in farming?

Class sub-problems:

1. What are the major roles of the farmer as a member of society and the economic community?
2. What are some of the major wants, needs and desires of consumers of an agricultural product such as milk?
3. What are some trends in consumer wants, needs and desires for dairy products which are likely to be improtant for the next five years?
4. What changes should one of the students in the class and his father make in their dairy operation in view of trends in consumer wants for milk products?

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* Robert L. Stone of Archbold, Ohio, the author of this unit, is a teacher of production agriculture and agricultural business at Pettisville High School. Mr. Stone received his bachelor's degree from Ohio State University in 1967. He is a graduate of Butler High School and has had previous experience as a teacher of vocational agriculture in South Central School in Huron County during 1967-69.

A TEACHING PLAN ON ADJUSTING AGRICULTURAL PRODUCTION, SERVICES AND MARKETING TO CONSUMER DEMAND[1]—(Continued)

Student Learning Experiences and Teaching Procedures:

A farmer is a: (teacher should list on chalkboard)

1. Father
2. Taxpayer
3. Buyer
4. Saver
5. Voter
6. Investor
7. Worker
8. Employer
9. Manager
10. Mechanic
11. Custom Operator
12. Electrician
13. Veterinarian
14. Bookkeeper
15. Politician
16. Leader
17. Public Relations Worker
18. Member of the Community

Generally, by combining all of the above. A farmer is a: Producer
Consumer
Citizen

Probably the most important role or the real job of a farmer is to *produce food.* Milk production can serve as an example of adjusting production practices to consumer wants and desires.

These questions may be asked by the teacher:

How many in this class sell milk?
How many in this class buy milk?
How many in this class drink milk?

Probably all of us are in some way direct consumers of milk so let's use John's farm as an example. John has to produce a product which the rest of the class would want and buy if offered for sale. Class, just what do we want when it comes to buying milk?

1. A consumers wants: (should be listed on the chalkboard by the teacher)
   - 1.1 Milk, at an economical price—we want a low price per quart.
   - 1.2 Fresh milk every day—people want to drink as much milk as they want to but within 3 or 4 days after it is produced.
   - 1.3 To buy milk at the grocery at the same time other food is bought. Delivery to doorstep is too expensive per quart and will spoil if not refrigerated immediately.
   - 1.4 Convenient containers—people prefer: ½ and 1 gallon size, non-returnable containers, molded handle or carrying rack, re-sealable container.
   - 1.5 Attractive appearing milk—homogenization breaks up the fat globules as they are dispersed evenly throughout the milk.

A TEACHING PLAN ON ADJUSTING AGRICULTURAL PRODUCTION, SERVICES AND MARKETING TO CONSUMER DEMAND*—(Continued)

1.6 Milk that tastes good—bacteria affects milk taste and the following practices will greatly reduce the amount of bacteria in milk.

1.61 Good sanitation

1.62 Milking and handling milk with equipment made of stainless steel, scratch resistant glass and rubber

1.63 Fast refrigeration to 38 degree F.

1.7 Milk that is standardized so that butterfat content of all milk is 3.5%.

1.8 Milk that is safe to drink and is from farms that are tuberculosis free, from cows that are calfhood vaccinated for Brucellosis, from cows that are free from mastitus, and milk that is free of chemicals. Chlorinated hydrocarbons and DDT are examples.

1.9 Lower butterfat—people prefer 3.5% milk rather than 5.0% milk.

1.10 Lower cholesterol—milk lower in fat is usually lower in cholesterol.

2. After listing the wants of the consumer, identify trends in consumption of milk five or ten years in the future.

2.1 Fresh whole milk
2.2 Cream
2.3 Evaporated milk
2.4 Butter
} Demand is down and will continue to decrease

2.5 Cheese
2.6 Low fat milk
2.7 Filled milk
2.8 Ice Milk
} Demand will increase with higher income

Refer to U.S.D.A. Yearbook, 1969—*Food For Us All*
Page 51 "Telescoping 20 Years of Change in the Food We Eat"

3. What changes could John make as a dairyman to satisfy the changing consumer wants?

3.1 Change dairy breeds—Have students study breeds of dairy cattle. Some produce lower butter fat than others.

3.2 Choose different marketing alternatives

3.21 Improve from Grade B to Grade A

3.22 Shop for milk buyer

a. Private dairies

b. Milk, Inc.

3.3 Increase efficiency of the dairy enterprise

3.31 Increase size of herd

3.32 Feed more concentrate

3.33 Use better balanced rations

3.34 Use udder health practices

3.35 Use artificial insemination

3.4 Use proper health and sanitation practices

3.41 Regular manure removal

3.42 Clip cows in fall

3.43 Use disinfectants regularly in the dairy barn

3.44 Use teat cup regularly

Movies:

"Dynamic Dairying"—Farm Film Foundation—16 minutes
"Profitable Ideas for Dairymen"—Swank Motion Pictures—10 minutes
"Feeding Cattle and Man"—Maine Department of Agriculture—12 minutes

A TEACHING PLAN ON ADJUSTING AGRICULTURAL PRODUCTION, SERVICES AND MARKETING TO CONSUMER DEMAND—(Continued)

References:

Dairy Management textbooks

Summary:

Have students apply the principle that *the consumer determines what we produce* to other agricultural products. How will farmers adjust their operations to provide the most of the highest quality products in thes enterprises?

Corn	Pork	Eggs
Soybeans	Beef	Wool
Wheat	Lamb	Fruits
Oats	Poultry	Vegetables

Have student work through an example which applies to his own farming program.

A TEACHING PLAN ON MEETING LEGAL REQUIREMENTS IN APPLYING HERBICIDES*

General objective of the teacher:

To develop in students of vocational agriculture an understanding of Ohio's legal requirements for the application of herbicides.

Performance objectives for students:

Students in this class should be able to:

1. List those herbicides which meet Ohio's legal requirements for safety and effectiveness.
2. Select equipment needed for safe application.
3. Adjust herbicide sprayers for proper application per acre.
4. Calculate the needed amount of three common herbicides for proper dilution in a 100 gallon tank.
5. List an operators financial liabilities when applying herbicides.
6. Apply for necessary licenses when applying pesticides.

Time required for teaching:

Two 2-hour sessions

Grade level:

This unit is designed for a senior class but could be appropriate for an adult or young farmer group. It may be a part of a larger unit on roles, rights and responsibilities of consumers.

Introducing the unit:

Pesticides are essential to modern agriculture. At the present rate of growth some scientists estimate that the world's population will exceed 6 billion people by year 2000 and that the production of food and fiber will need to double in the western world. Research and technology have introduced many new chemicals for use in agriculture. Many people are becoming alarmed over chemical pollution of the water and soil. The farmer has the challenge to produce more food of higher quality and at the same time protect himself and the environment from chemical poisons.

A new Ohio Pesticide law has been enacted in the State of Ohio regulating the purchase, use and application of pesticides. It requires that persons applying pesticides for hire be licensed. It regulates the use of eighteen pesticides that cons[illegible] a highly toxic dermal hazard for which there is no effective or satisfactory substitute, and six pesticides are restricted to use by professional pest control operators.

Class Problem:

What are some of the legal aspects that we need to know when using herbicides?

Student Learning Experiences and Teaching Procedures:

The Federal Insecticide, Fungicide, and Rodenticide Act (1947) requires that pesticides shipped in interstate commerce be registered with the United States Department of Agriculture. To be registered, the manufacturer must submit proof that the chemical will safely and effectively accomplish the purposes for which it is made, when used according to directions developed for it's use. The burden of proof is on the manufacturer.

Some of Your Questions Answered[1]

1. Q What is this new Use and Applicator Law?

   A This law requires persons who apply pesticides commercially, (or for hire) to be licensed. It restricts about two dozen pesticides to uses for which there is no effective or satisfactory substitute.

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* The author of this unit is Ray E. Diley, teacher of production agriculture in Milton Union Schools, West Milton, Ohio. Ray has taught vocational agriculture for 30 years and among his many achievements is that of being a Past President of the Ohio Vocational Agriculture Teachers Association. Mr. Diley received his Bachelor's degree from Ohio State University in 1941, and his Master's degree in 1954.

[1] Ohio Department of Agriculture, Division of Plant Industry, Reynoldsburg, Ohio 43068.

2. Q What is included in the term "pesticide?"
   A Also called "economic poisons" under the companion registration law, the terms mean the same and include insecticides, herbicides and gunficides; in fact, any material used to kill or repel pests of any kind.
3. Q Are any pesticides banned from use in Ohio?
   A Not yet, and not by this law. However, if the federal government does actually ban all uses of any pesticide (as it may) this will automatically change the status of such products in Ohio from "restricted use" to *no* use.
4. Q Who is affected by this law?
   A You, if you live in Ohio, and especially if you use or sell pesticides. The law and the regulations adopted under it, require all who deal in or use pesticides to store and handle them in such a manner that they will not contaminate foods, feeds, fertilizers, water, etc. Also, there may be some pesticides that you have been using that you will be unable to get.
5. Q What pesticides are restricted?
   A Two dozen in all, and of these, six are restricted to professional use because special knowledge or techniques must be employed for their safe use. However, they have not been in common use by individuals. In addition, *concentrates* of Aldrin, Dieldrin, Disyton, Thimet and Sodium Arsenite, and *all* formulations of DDT, TDE, Endrin, TEPP, Phosphamidon, Bidrin, Parathion, Methyl Parathion, Systox (Demeton), Phosdrin, DNBP, DNOSBP and Paraquat are restricted.
6. Q As a farmer, the only one of these I have been using is Methyl Parathin. I need it for alfalfa weevil control. What do I do now?
   A Consult the new alfalfa weevil control Bulletin #L-130 for control methods. Also, your Cooperative Extension Agent in Agronomy can help to guide you as to the need for the product. If you do need it, you can get a User's Permit at the Cooperative Agriculture Agent's office. One copy of the permit must be given to the dealer from whom you buy it.
7. Q Would this be a proper procedure to obtain other materials on the restricted list?
   A Yes, consult the latest recommendations of the Extension Service. If you have a problem and the material you need to use is not on the Extension recommended list, but *it is* on the list of registered uses for this pesticide, you may still be able to get the permit.
8. Q Am I allowed under this law to spray my neighbor's corn field?
   A Yes, *if you have an applicator's license.*
9. Q How do I get an applicator's license?
   A Apply (suing a special form available through every County Cooperative Extension Agent or directly from the Department) to the Division of Plant Industry, Ohio Department of Agriculture, Reynoldsburg, Ohio 43068. Send your check in the amount of $50.00 with the application. You will receive information to study for your examination, and assignment to a one-day school where the examination will also be given. You also need a certificate of liability insurance coverage.
10. Q I also need liability insurance?
    A Yes, although there are some alternatives which you might care to investigate. For most classifications the coverage must be $100,000 bodily injury liability each person, and a $300,000 each occurance. Property damage coverage requires $20,000 each occurance and $100,000 aggregate.
11. Q Do I have to renew my license each year?
    A Yes, before March 1st to avoid a 25% penalty.
12. Q Do I have to take an examination each year?
    A No, you may renew each year without re-examination until it is determined that a re-examination will be required.
13. Q I am a pesticide applicator and have a man who works for me. He operates a spray rig, advises the farmer what to use and within certain limits acts for me when I am busy elsewhere. Does he need a license too?

A Yes, he must be licensed as a pesticide operator. He will complete an application form similar to yours but he is covered by your insurance and you are responsible for his acts when so engaged. His license costs $10.00 and he must take an examination similar to yours (and probably at the same time).

14. Q My brother is employed by the County Commissioners. In the summer as a part of his job, he sprays the roadside to kill weeds. What kind of a license does he need—or doesn't he need one?

A He must be licensed as a Public Operator. His examination, so far as subject matter is concerned will be the same as if he performed this service under contract. The government agency, which is his employer, will not have to pay the State for his license.

15. Q Now, I have a Pesticide Applicator's license. How do I buy "restricted use pesticides?"

A If the pesticide has "legitimate use" within the classifications in which you are licensed, you simply buy it from your dealer and sign the register—giving your applicator license number.

16. Q Will all pesticide dealers handle "restricted use" pesticides?

A No, but probably all who sell primarily to agricultural users will obtain "Dealer's Permits." They, too, can obtain applications for this permit from the local Extension office or the Division of Plant Industry office at Reynoldsburg.

17. Q What is the fee for a Dealer's Permit?

A No fee!

18. Q What is the fee for a User's Permit for a restricted-use pesticide?

A No fee!

19. Q On the User's Permit, can I buy and use two materials?

A No, one permit for each material.

20. Q Can I get all I want on the permit?

A You can probably get all you *need* for one application, or if repeated applications are advised—as for orchard sprays—for all season. It is better not to hoard the material—the recommendations may change; the problems of storage, freezing, accidents do not make it advisable. A new permit can be obtained if it is needed.

21. Q If livestock became poisoned from pesticide application, must this be reported to the Director of Agriculture?

A The applicator must report to the Director of Agriculture *any* property losses amounting to $250 or more within ten days, allegedly resulting from his operations.

22. Q Will I have to obtain a separate use permit to purchase a pesticide if I want to buy some from two dealers?

A Yes. The dealer retains a copy of the use permit that you give him. Purchases to fill one permit will have to be made from one dealer.

23. Q When applying a restricted pesticide to a field, how should the field be posted? Are there any guides to size of print and location of signs?

A The field will be posted in a manner prescribed with the cautions listed on the label of restricted pesticides. Some pesticide firms have indicated they will furnish suitable signs. Labels should be sufficient to last for the necessary length of time that a warning must be in effect, but not much longer. They should be taken down if they do not "self-destruct."

24. Q How accurate must records be kept and do they have to be sent to the Director of Agriculture?

A Good records must be kept to provide one with information if it is needed for reference purposes. The records do not have to be sent to the Director of Agriculture, but they must be made available for his inspection upon request. Pesticide dealers will keep records on what was sold, applicators will keep records of use. Records will serve for your own protection in case of a problem for which you are not to blame.

25. Q Will equipment be subject to inspection before it can be used by the applicator?

A No. Equipment will be inspected only if there appears to be a need. Poor control, leakage or spillage in unwanted areas might be justification for inspection.

26. Q Can I still use parathion, TEPP or systox for the control of orchard pests as I have for the past 10 years?
    A You can still get the pesticides you need from the control of field and orchard pests—but you will have to obtain User's permits for the restricted materials. Basically, all that is required is a genuine *need* and assurance that the material will be *used safely*.
27. Q Do I have to pay $50 as an applicator (or $10 if I am an operator) for each classification for which I am licensed?
    A No. You can take as many of the examinations as you wish for the same fee.
28. Q Is this an annual fee or a "one shot" deal?
    A The fee must be paid each year before March 1st.
29. Q If I fail the first examination, how soon can I take another, and do I have to pay an additional fee?
    A You can take another examination any time after five days following the previous examination that an examination is scheduled, or that an appointment can be arranged. No additional fee is required.
30. Q If I make custom applications, can I be licensed as an operator instead of an applicator—it's cheaper.
    A No, an operator, to be licensed, must be employed by a licensed applicator. An applicator must carry liability insurance (or equivalent) and the operator is covered by his employer's insurance.

Student and Teacher Activities

1. Have students write letters requesting application forms for a pesticide operator's license.
2. The teacher should show and discuss the film strip "Facts About Pesticides." This filmstrip, in full color, contains valuable information about the safe use of pesticides. A phonograph record accompanies the filmstrip (33-1/3 RPM) for use with a projector. A narration guide is included. This filmstrip may be retained permanently. It's showing time is only 13 minutes. This film is available from The National Agricultural Chemicals Association, 115 Fifteenth Street, Northwest, Washington, D.C. 20005.
3. Show film "No Room for Weeds" (color-27½ min.) Union Pacific Railroad, Department of Agricultural Department, 1416 Dodge Street, Omaho, Nebraska 68102.

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   Geigy Chemical Company.
2. Agricultural Chemicals Newsletter.
   Dr. Acie C. Waldron, Extension Specialist, Pesticide Safety
   B & Z Building, 1735 Neil Avenue, Columbus, Ohio 43210.
3. Questions and Answers on Ohio Pesticide Use and Application Law.
   Ohio Cooperative Extension Service.
4. Ohio Economic Poisons Law and Ohio Pesticide Use and Applicator Law.
   Dr. Harold Porter, Ohio Department of Agriculture,
   Division of Plant Industry, Reynoldsburg, Ohio.
5. Our Struggle Against Pests—P A No. 772
   U.S. Department of Agriculture
   Office of Information
   Washington, D.C.
6. "Be Prepared When Using Pesticides."
   Cooperative Extension Service
   The Ohio State University.
7. "Pesticides and the Environment."
   Dr. Acie C. Waldron, Extension Specialist, Pesticide Safety
   B & Z Building, 1735 Neil Avenue, Columbus, Ohio 43210.

8. Agricultural Chemicals Student Manual
   Ohio Agricultural Education Service.
9. Weed Control—Cultural and Chemical
   Ohio Agricultural Education Service.
10. Agronomy Guide
    Cooperative Extension Service, The Ohio State University.
11. Ohio's Environment
    Bureau of Environmental Health.
12. 4 Keys to Pesticide Safety (leaflet)
    National Safety Council
    425 North Michigan Avenue
    Chicago, Illinois 60611.

A TEACHING PLAN ON ANALYZING AGRICULTURAL ADVERTISING*

General objective of the teacher:

It is the aim of this unit to have students become familiar with the advertising used by agricultural businesses and to get some experience in evaluating advertising.

Performance objectives for students:

Students who have studied this unit should be able to complete the following:

1. List the various media used in a comprehensive advertising campaign.
2. Recognize the advantages of advertising to consumers, producers and the economy as a whole.
3. Select useful factual statements from various advertisements.
4. Identify emotional appeals in agricultural advertising.
5. Use a series of advertisements to assist in making an agricultural purchase.

Time required for teaching:

3 hours of classroom time

Grade level:

This unit is designed for grades 11 or 12 and is a part of the study of Consumer Behavior Determinants.

Introducing the unit:

Advertising benefits everybody.[2] Advertising makes possible reduced prices. Lower prices result when many people buy. Large volume sales make mass production and distribution possible.

Advertising supports our news media such as newspapers, magazines, T.V., and radio. These are our chief sources of news, entertainment, and information.

Advertising means increased sales which in turn means more jobs and better wages.

Advertising saves time and trouble. It tells the prospective buyer where he can get what he wants and at what price.

Advertising spurs competition which has been a strong force in our American economy.

Class Problem:

How can John use advertising to help in buying a new corn picker?

Class sub-problem:

1. What types of advertising should be considered?
2. How can facts in advertising be identified and verified?
3. What emotional appeals are used in advertising farm machinery?

Accomplishing the objectives of the unit:

Types of Advertising[2]

1. Display cards
2. Floor displays
3. Store signs
4. Truck identification
5. Road signs
6. Direct mail
7. Printed handbills
8. Newspaper and magazine ads
9. Radio announcements
10. Television

* This unit was developed by Roger T. Park, teacher of production agriculture and A.W.E. at Licking Heights High School, Summit Station, Ohio. Mr. Park graduated from Ohio State University in 1947 and took additional graduate work in 1956 and 1957. He is married, has 4 children and resides at Route 2, Pataskala, Ohio. He has 17 years of experience, the last 15 being at Licking Heights. Previously he has served three years in the Armed Forces and has operated a general farm for 8 years.

[2] Business Practices for "Agricultural Machinery Dealers" Ohio Agricultural Education Service, 1969.

Student Analysis of Advertising

Ask students to gather as many corn picker advertisements as possible.

List all factual information that you can from the advertisements. Below are some of the possible facts to be considered: (Resource: Agr. Business Unit 5, Curriculum Materials Service)

1. Use of the product
2. How the product works—or how it is used
3. What the product is made of
4. How the product is made
5. Instructions for using
6. Who manufactures the product
7. Maintenance of product if not consumable
8. What size package it comes in
9. Cost of the product

Obtain factual information that is needed concerning the product, but not included in the advertisement. Divide the class into groups and ask them to obtain the information as an overnight assignment.

ECONOMICS OF CORN PICKER OWNERSHIP[3]

The decision of whether or not to buy specialized farming implements must continually be made by farmers. A wise decision of whether or not a corn grower should buy a corn picker, and if so, what kind, is based upon the following factors:

1. Cost of machine ownership
2. Costs of alternative methods of harvest
3. Number of acres you will harvest, considering both your own and possible custom work
4. Other considerations
   a. Is custom harvest or machine leasing available? If yes, how much does it cost?
   b. Can timeliness of harvest be achieved through custom work?
   c. Would the costs of ownership earn higher returns if invested elsewhere in your total farming operation?

OTHER CONSIDERATIONS TO THINK ABOUT BEFORE DECIDING WHETHER OR NOT TO PURCHASE A CORN PICKER

In the example problem above, we found that if the custom rate was $7 per acre, it would be slightly cheaper for the farmer to hire a custom picker to harvest his 100 acres. However, based on other considerations, he might want to go ahead and make the purchase.

Some of these other considerations that might influence his decision are:

1. Timeliness of operation. What will be the loss in yield and quality if harvest is delayed?
2. Does the custom worker have the ability to do a satisfactory job of picking?
3. Do I have the mechanical ability to operate a picker efficiently?
4. How important is pride of ownership? Am I free to make decisions? Can I assume this increase responsibility?
5. How does owning a picker fit into my overall long range farming plans?
6. Can I reduce my cost by joint ownership?
7. Will a used machine meet my needs, or could I lease a picker when I need one?
8. Is adequate repair service available in my community?
9. Could I use the money I would invest in the picker to a better advantage elsewhere in my business?
10. Would I have time to do custom work? Do I have other important jobs to do at corn harvest time?
11. Do I enjoy work in the field?

[3] "Corn Pickers and Picking Corn", The Ohio Agricultural Education Service, 1970 PP 121 and 121

Sort out information that is emotional in nature and not factual. Some things to look for are:[4]

1. free gimmick—"free" or "free gift"
2. —tell you want I'm gonna do. I'm gonna save you real money[4]
3. phoney contests
4. misrepresentation
5. fear sell
6. bait and switch
7. referral discount
8. personal touch

Compare all facts that are obtained and that are meaningful and make necessary decisions.

Summary

Compare the total number of useful facts obtained in Chapter IV, Economics of Corn Picker Ownership,[5] with those contained in the advertisements.

Students should also rank each of the advertisements in terms of the amount of factual information each contained.

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[4] "Tell Ya What I'm Gonna Do" Consumer Protection Agency, 118 St. Clair Ave., Cleveland, Ohio

[5] "Business Practices for Agricultural Machinery Dealers" Ohio Agr. Education Service, 1969

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A TEACHING PLAN ON EMOTIONAL vs. LOGICAL BUYING OF FEEDS AND SEEDS*

General objective of the teacher:

To have students develop the ability to buy agricultural inputs on the basis of logic rather than emotion.

Performance objective for students:

1. The student can demonstrate logical buying behavior.
2. The student can identify emotional buying behavior.
3. The student can distinguish between emotional and logical buying.
4. The student can calculate his economic advantage resulting from logical buying.

Time required for teaching:

3 hours

Grade level:

Freshman or sophomore and as a part of the study of Consumer Behavior Determinants.

Introducing the unit:

The teacher may start this unit by discussing these items with the class:

Many times people buy items which they do not really want. When they return home, they have the feeling they would have been better off without the item they bought. Sometimes high-pressure salesmen create an artificial need for the item being sold. The problem then comes to the point of knowing the item is not needed, that it will not make your work any easier, or that you cannot afford it. But you want it due to emotional forces.

How do you buy such items as livestock feed or field seeds? Do you use a logical or an emotional basis for your purchases.

Class Problem:

What facts on a protein supplement should Steve gather and analyze if he is to make a logical rather than an emotional decision?

Accomplishing the objectives of the unit:

What is logical buying?

1. **Several factors enter into making a local buying decision. Before going further, stop to list the factors you think affect your buying decision on a protein supplement.**

a. _____ c. _____ e. _____

b. _____ d. _____ f. _____

Now, are these logical reasons? What do we mean by logical buying?

Webster defines logic as "the science of correct reasoning" or "what is expected by the working of cause and effect?"

Thinking now of these definitions, a cause might be considered a need or want. For example, you may be planning to work in an agri-business occupation and therefore need a car to get to and from work. However, the effect of having a car may be a matter of not being able to keep up with the expense. Another way of looking at cause and effect is that by having the car you could get the type of job training you want.

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* The writer of this unit is Rodney M. Kissell. Rodney received his B.Sc. in Agricultural Education from O.S.U. in 1968. He is currently teaching at Morgan High School, Morgan County. Mr. Kissell's previous experience includes full time farming, a half year of agricultural business experience and 3 years of teaching vocational agriculture.

Now back to the factors you listed above. Some you may have listed are your: values, activities, wants, needs, or it may be your experiences, problems, and habits.

Think now about some items you may purchase during the next year—a used or new tractor, record player, saddle horse, registered gilt, or a set of wrenches. What would be the cause of your buying, and what would be the effect after you bought?

An example of factual information needed for reaching a logical decision on urea as a protein supplement is given below:[6]

"Urea can be used as a protein substitute in the *ruminant* animal. Urea plus microorganisms in the rumen will produce *Amino acids.*

Remember that it is the amino acids of the proteins that are used by the animal's body.

The urea plus microorganism system is a short cut to amino acid production. The proteins have to be broken down in the rumen to nitrogen from which the amino acids are formed. The urea is already a nitrogen which makes it ready to go to work in the forming of amino acids.

You may be familiar with urea as a nitrogen fertilizer. The urea used in feed is the same product except that it is a feed grade.

The protein equivalent of urea is 262 percent.

This statement means that there is enough nitrogen in 100 pounds of Urea for rumen organisms to synthesize the equivalent of 262 pounds of protein.

Urea is used as an economical source of protein for ruminant animals.

There are some limitations to the feeding of Urea that the feed man should be aware of.

There is a possibility of Urea poisoning:

On entering the rumen, urea is broken down and ammonia is released.

The ammonia released is used by the rumen bacteria. If more ammonia is released than the bacteria can immediately use, it is absorbed through the rumen wall into the blood stream.

The liver takes the ammonia from the blood and converts it back into urea which is excreted through the urine.

The elimination of excess nitrogen by the kidneys is perfectly normal. However, when the ammonia level in the blood is at a very high level, this might be more than the liver and kidneys can handle and would cause a condition known as Urea poisoning.

Follow manufacturer's recommendations:

Urea is one of the feed ingredients that is very satisfactory when used properly but will give adverse results when not used carefully.

The manufacturer's recommendations should be followed carefully in using Urea.

Urea should always be mixed with other feeds. It should never be sprinkled by hand on top of other feeds.

Thorough mixing is of the greatest importance with urea supplements."

Facts Needed in Buying Hybrid Seed Corn[7]

An example of consumer information needed in selecting hybrid seed corn is given below:

Use each of the following factors to help decide upon the most promising corn hybrid for your use next year. You may not be able to find the complete information for each hybrid, but fill in as much as possible. The seed corn salesman will be able to help you with this if you are having trouble finding the information.

Type Cross: The type of cross will be single, three-way, or double cross.

Days to Maturity: The maturity rating may be in actual number of days or listed as short, medium, or full season.

Recommended Planting Rate: Recommendations may be given in number of stalks per acre, narrow or wide row planting, or recommended for thick planting.

[6] "Mixing Ingredients" *Feeds* Student Manual, Agricultural Education Service, 1968—pp. 31-32.

[7] "Crop Varieties and Hybrids" *SEEDS* student manual, p. 37 Agricultural Education Service, Ohio State Department of Education, 1968.

Resistance to Disease and Insects: Ratings are generally given for aphid resistance, stalk rot, leaf blight, smut, and corn borer.

Stalk Strength: Separate ratings may be given for stalk and root strength. Stalk and root strength may be very important where the crop has to stand late in the season before harvesting.

Picking Qualities: The picking qualities may be indicated by the height of the ear on the stalk, freedom from husks, or shank strength.

2. **What is emotional buying?**

How do we identify emotional buying? Is there a cause for emotional buying? Do you need the item you are looking at? What will be the effect of your decision?

Emotional buying can be immediate. You have not done any thinking about it before, but all of a sudden you make a purchase. In another case, you may have been thinking of the item but didn't think you could justify the purchase. However, due to the emotional appeal of the item or sales person, you buy the item.

Take a few minutes now to think about some items you have bought recently, Why did you buy them? Have they helped you? Would you buy the item again?

Now discuss with the teacher and your classmates some of their purchases which they think were made due to emotions. What are some of the forces which promoted the purchase? Consider some of these: sex appeal, peer group, and self-satisfaction. Many times sales people will indicate that everybody is buying the item and it really is pretty. Isn't that cute? It would look so nice in your home.

3. **What is the difference between logical and emotional buying?**

Talk with an agri-business salesman who is willing to discuss the differences between these two modes of buying.

Have your guidance counselor explain how emotions affect peoples' decisions.

Conclusions:

1. Much satisfaction can be obtained from your buying decisions when you know why and understand why you made that purchase.

2. An individual can save money and become a more efficient manager when he buys by using logic rather than emotion.

A TEACHING PLAN ON PLANNING FOR PART-TIME FARMING*

General objective of the teacher:

To help vocational agriculture students to compare part-time with full-time farming as a means of arriving at their goals in life.

Performance objectives for students:

After completing this unit of studies most students should have the ability to:

1. Name, understand, and explain the alternate means of arriving at their farming goals including part-time farming.
2. List the advantages and disadvantages of part or full-time farming.
3. Calculate the capital required to start in part-time and full-time farming.
4. Estimate the costs and returns for typical part-time and full-time farming situations.
5. Visualize what their future will be 10 years hence as part-time farmers or as full-time farmers.

Time required for teaching:

6 hours

Grade level:

Designed for juniors and seniors as a part of their study of Income Procurement.

Introducing the unit:

The students should be introduced to the unit, by locating and stating just what the student's problem is. To do this, involve the students in active discussion so they can "see it like it is.

Students should be asked to define part-time farming. It should be brought out, there are several possible alternate methods in making a decision as to the type of farming they wish to pursue; namely—part-time, partnership, or full-time farming and the possibility of taking a non-farm agricultural job, so as to later get started in farming. To do this, many factors must be considered, evaluated, and a realistic conclusion reached by each student.

Class Problem:

Should Steve become a part-time farmer for a few years as a means of getting started in farming with his father?

Class sub-problems:

1. If you take a part-time job, is it a step in the process of becoming a full-time farmer? Why? How?
2. If you wish to become a full-time farmer, what other methods or alternatives might you use to arrive there?
3. What are the advantages of part and full-time farming?
4. What are the disadvantages of each?
5. What income are you setting for your goal in each?
6. Why do we have more part-time farmers and fewer full-time farmers, today, than 10 or 20 years ago?
7. Does this have any significance to you?

Some Teaching and Learning Experiences:

1. Have students in class who are living on farms tell all they can about their home farm and farm set-up for both part and full-time farming.

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* This unit on Part-Time Farming was prepared by Lee D. Glass who is a teacher of agri-business at Tri-County Joint Vocational School at Nelsonville, Ohio. Mr. Glass who lives at Sharpsburg in Athens County received his Bachelor's degree in Agriculture in 1931. He has twenty-five years experience as a farm operator, and has had 11 yrs. of teaching experience. In addition to his B.Sc. Mr. Glass has taken additional work in agricultural education each year since 1968.

"The 1964 Census of Agriculture shows that, of 140,000 farm operators in Ohio, 53,272 were working off their farms one hundred days or more. This represents about 48% of the total. This number, who are defined as part-time farmers, has increased continuously for the past 20 years probably due to the ease of farm people obtaining employment in most communities in Ohio."[8]

3. Have outsiders discuss with the class their operations, costs, and income for both type farms.

"In an O.S.U. study four classes of part-time farmers were identified. Those who worked 100 days or more off-the-farm were classified as follows.[9]

Residential part-time farmers—Where the total value of agricultural production was less than $250.

The next category called *Subsistence Farmers* were similar except that $250, including that for farm use, was considered.

The third category—*some Commercial part-time farmers had* from $250 to $1190 in farm income.

Commercial part-time farmers—had sales of farm products amounting to $1200 or more. This group made up 47% of all part-time farmers.

Vocational agriculture teachers are generally most concerned with *commercial* part-time farmers. Of this group, 31% were located in northeastern Ohio, 27% in southeastern Ohio and 43% in western Ohio. Actually the sales of agricultural products averaged more than $3000.00 on these commercial part-time farms. The acreage of commercial part-time farms for all areas of the state was 102 acres, with the largest farms being in southeastern Ohio with 130 acres. In western Ohio commercial part-time farms averaged only 84 acres."

4. Also have these outside farmers explain why they are on this type of farm; give the advantages and disadvantages as they see them and what in general that caused them to be on a farm.

"*Here are Some Important Findings Regarding the Farm Operations of Ohio Part-Time Farmers*[10]

The average length of residence on the present farm was 12 years. About 90% of the operators owned all or part of the land they operated. About 20% of the operators had farmed full-time from their present location before becoming part-time farmers. A financial summary of the net worth of all part-time farmers in Class 4, the commercial group, showed that their investments were as follows:

Livestock	$ 1,656.00
Farm Equipment	2,331.00
Total Chattels	6,704.00
Farm Leal Estate	14,484.00
Total Assets—	$21,088.00
Total Debt—	2,743.00
Total Net Worth —	$18,445.00"

5. Divide class into sides and debate as to which is best—part-time or full-time farming.
6. Have students study the following bulletins—"The Part-Time Route to Full-Time Farming," Bulletin No. 793 OARDC—September 1957, by Moore and Wayt. "Some Economic and Social Aspects of Part-Time Farming in Ohio," Bulletin No. 837 OARDC, August 1959, by Wayt-Moore-Hillman. Agricultural Education Circular 641—"Some Publications of Part-Time Farming for Vocational Agriculture", an Ohio State University Study. "Part-Time Farming," Farmers Bulletin No. 2178, U.S.D.A. "Multiple Job-Holding by Farm Operators," 1964, Bulletin No. 5, Michigan State University, East Lansing, Michigan.

Conclusions:

The students should now be able to bring together all of the ideas, figures, advantages, and disadvantages, and be able to arrive at a decision as to their goal in life. The instructor should assist each student individually in their evaluation and in coming to the final decision.

[8] *United States Census of Agriculture, 1964.* Issued by the United States Bureau of the Census, Washington, D.C. (Government Printing Office) 1965.

[9] "Some Economic and Social Aspects of Part-Time Farming in Ohio." Research Bulletin 837. The Ohio Agricultural Experiment Station, August, 1969.

[10] *Ibid.*

END